

AGGCCTCGGTGACCGTGATCATGTTGCCG  
CGAAGGTCATTACGTTGTACGTCAATGAC  
CATCT**REPORTED**GCTCGTTATGGGGAT  
GAATCGGGAGTGGTGAT**TUBERCULOSIS**CO  
GAGAGATCGATGGCGAACATCTGGCCCTGGTT  
ATCGCCCCGCCACCAAGA**IN**AGCCATTGTT  
AAGTCGCCCGTGTGAAAGAACGGCCGGTATTGA  
CGTTGCCGGATTGAAGA**THE**AGCCGGTGT  
TGGTGTCAACCCGGTTATAGCTGCCGGTAT  
TGGTGTCAACCCACGT**UNITED**TGAAGTTGCC  
GGTGTGGTGTACCGACGTTGAAGGCCGCC  
GGTGTGGTAGCTGCCCGTGT**STATES**GTAC  
AAGCCCCTGTTGAAGTCGCCGGCGTTGAG  
GATGCCCGTGTAGCTGCCAGCATTGAG  
GATGCCGGTATTGTCGGTACCCGGTTCC  
GATACCCCAGTTCCCGGTGCCCGAGTTG  
GATGCCGACGTTCCGGTGCCCGCGTTGA  
AGATGCCAACGTTATTGGTGCCCGAAC  
CAGGCCGCTGTTGCCGGTGCCCC**2012**AGT  
TCAGCCGCTAGCAATATTGAAGGCCCTGCTG  
GTTGTCGCCGGACAGCCCGATGCCGATGTT  
GTTGTTGCCGGTGTGGCGAAC  
GTT  
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention  
Division of Tuberculosis Elimination



**For more information, contact**

**Division of Tuberculosis Elimination**

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention  
Centers for Disease Control and Prevention

1600 Clifton Road NE

MS E-10

Atlanta, GA 30333

Phone: (404) 639-8120

Fax: (404) 639-8959

E-mail: [TBInfo@cdc.gov](mailto:TBInfo@cdc.gov)

Web address: <http://www.cdc.gov/tb/>

**Tuberculosis Applications Help Desk**

Phone: (678) 460-7828

Email: [ntss@cdc.gov](mailto:ntss@cdc.gov)

**Ordering Information**

Copies of *Reported Tuberculosis in the United States, 2012*, are available from the Division of Tuberculosis Elimination's online ordering system at <http://www.cdc.gov/tb/>.

**This report is also accessible via the internet at <http://www.cdc.gov/tb/>**

**Suggested Citation:** CDC. *Reported Tuberculosis in the United States, 2012*. Atlanta, GA: U.S. Department of Health and Human Services, CDC, October 2013.

All material in this report is in the public domain and may be reproduced or copied without permission. However, citation as to source is requested.



# **Reported Tuberculosis in the United States**

**2012**

*Publication Year 2013*



## **Reported Tuberculosis in the United States, 2012**

Centers for Disease Control and Prevention

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention  
Division of Tuberculosis Elimination

October 2013

Centers for Disease Control and Prevention.....Thomas R. Frieden, M.D., M.P.H.  
Director

Office of Infectious Diseases.....Rima Khabbaz, M.D.  
Director

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention...Jonathan Mermin, M.D., M.P.H.  
Director

Division of Tuberculosis Elimination .....Kenneth G. Castro, M.D.  
Director

Surveillance, Epidemiology, and Outbreak Investigations Branch ..... Thomas R. Navin, M.D.  
Chief

Surveillance Team ..... Roque Miramontes, P.A.-C., M.P.H.  
Team Lead

Communications, Education, and Behavioral Studies Branch ..... Wanda Walton, Ph.D.  
Chief

Field Services and Evaluation Branch.....Terence Chorba, M.D., MPH DSc  
Chief

Data Management and Statistics Branch .....José E. Becerra, M.D., M.P.H.  
Chief



*This report was prepared by*

**Surveillance, Epidemiology, and Outbreak Investigations Branch  
Division of Tuberculosis Elimination  
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention  
Centers for Disease Control and Prevention**

**Surveillance Team**

Roque Miramontes, P.A.-C., M.P.H.  
Carla Jeffries, J.D., M.P.H.<sup>1</sup>  
Robert Pratt, B.S.  
Rachel S. Yelk Woodruff, M.P.H.  
Lori Armstrong, Ph.D.  
Elvin Magee, M.P.H., M.S.  
Lilia P. Manangan, R.N., M.P.H.  
Glenda T. Newell  
Kai Young, M.P.H.

**Molecular Epidemiology Activity**

Smita Ghosh, M.S.  
J. Steve Kammerer, M.B.A.

**Epidemic Intelligence Service Officer**

Courtney M. Yuen, Ph.D.

*Others contributing to the production of this publication*

**Office of the Director**

Philip LoBue, M.D., FACP, FCCP

**Data Management and Statistics Branch**

Sandy Price, P.M.P.<sup>1</sup>  
Vic Bowker<sup>1</sup>  
Cynthia Adams<sup>1</sup>  
Stacey Parker<sup>1</sup>

**National Center for Health Marketing, Division of Creative Services**

Brenda Holmes

**Field Services and Evaluation Branch**

**Communications, Education, and Behavioral Studies Branch**

All state and local health departments throughout the United States whose staff collected and reported the data used in this publication.

---

<sup>1</sup> CDC Information Management Systems Contractor



## Preface

*Reported Tuberculosis in the United States, 2012* presents summary data for tuberculosis (TB) cases verified and counted in 2012. Report of Verified Case of Tuberculosis (RVCT) forms are submitted to the Division of Tuberculosis Elimination (DTBE), Centers for Disease Control and Prevention (CDC), by 60 reporting areas (the 50 states, the District of Columbia, New York City, Puerto Rico, and seven other jurisdictions in the Pacific and Caribbean). First released in 1993, the RVCT was expanded in 2009 to collect additional information for each reported TB case in order to better monitor trends in TB and TB control.

*Reported Tuberculosis in the United States, 2012* is similar to previous publications (see page xi, #19) and contains an Executive Commentary, Technical Notes, seven major data sections, and appendices. The Executive Commentary includes highlights of the 2012 data, and the Technical Notes section provides information about how the data were collected and reported; these sections are included to help the reader interpret the data.

*Morbidity Trend Tables* present trends in the overall TB case counts and case rates for the United States and the United States Affiliated Pacific Islands by selected demographic, clinical, and genotypic characteristics. *Morbidity Tables, 2012* present overall case counts and case rates for the United States and other jurisdictions by selected demographic and genotypic characteristics for the most recent year for which data are available. *Morbidity Tables, 2010* present overall case counts for the United States by selected demographic and clinical characteristics for the most recent year for which data are available on certain follow-up variables that require a longer data collection period. *Morbidity Tables, Reporting Areas, 2012* present TB case counts and case rates by state and by other jurisdictions with tables of selected demographic and clinical characteristics. *Morbidity Tables, Reporting Areas, 2010*

present data for the most recent year for which data are available on certain follow-up variables that require a longer data collection period. *Morbidity Tables, Cities and Metropolitan Statistical Areas, 2012* provide TB case counts and case rates by metropolitan statistical areas (MSAs: see Technical Notes, page 9, for further details) with tables of selected demographic and clinical characteristics. *Surveillance Slide Set, 2012* presents figures from the annual surveillance slide set, which emphasize key recent trends in TB epidemiology in the United States. The slides with accompanying text can also be viewed and downloaded from the DTBE website accessible at <http://www.cdc.gov/tb/>.

The current *Tuberculosis Case Definition for Public Health Surveillance and Recommendations for Reporting and Counting Tuberculosis Cases* are provided in Appendices A and B, respectively (pages 167 and 168). *National Surveillance for Severe Adverse Events Associated with Treatment for Latent Tuberculosis Infection - Reporting Information* is provided in Appendix C (page 177). *Genotyping Background Information and Glossary* is provided in Appendix D (page 178).



## **Previous Statistical Reports in this Series:**

1. *Special Tuberculosis Projects, 1961–1965*. Atlanta: CDC; 1966.
2. *Special Tuberculosis Projects, December 1965*. Atlanta: CDC; 1966.
3. *Special Tuberculosis Projects, June 1966*. Atlanta: CDC; 1967.
4. *Special Tuberculosis Projects, December 1966*. Atlanta: CDC; 1967.
5. Summary Report. Atlanta: CDC; 1967.
6. *Special Tuberculosis Projects, June 1967*. Atlanta: CDC; 1968.
7. *Tuberculosis Program Reports, December 1967*. Atlanta: CDC; 1968.
8. Tuberculin testing during 1966–1967 school year. In: *Tuberculosis Program Reports*. Atlanta: CDC; 1968.
9. *Tuberculosis Program Reports: Six Month Period Ending June 1968*. Atlanta: CDC; 1969.
10. Program Performance Analyses, June–December 1968. In: *Tuberculosis Program Reports*. Atlanta: CDC; 1970.
11. Tuberculin testing data, 1967–1968 school year. In: *Tuberculosis Program Reports*. Atlanta: CDC; 1970.
12. The project years, 1961–1969, In: *Tuberculosis Program Reports*. Atlanta: CDC; 1970.
13. Tuberculosis programs (for years 1970–1973). In: *Tuberculosis Program Reports*. Atlanta: CDC; 1971–1974.
14. *Reported Tuberculosis Data* (for years 1962–1973). Atlanta: CDC; 1963–1974.
15. *Tuberculosis Statistics: States and Cities* (for years 1974–1985). Atlanta: CDC; 1971–1986.
16. *Tuberculosis in the United States* (for years 1974–1986). Atlanta: CDC; 1976–1987.
17. Tuberculosis program management in the United States, 1984. In: *Tuberculosis Program Reports*. Atlanta: CDC; 1986.
18. *Tuberculosis Statistics in the United States* (for years 1987–1992). Atlanta: CDC; 1989–1993.
19. *Reported Tuberculosis in the United States* (for years 1993–2011). Atlanta: CDC; 1994–2012.

**Reports from 2006 through 2012 are available on the Internet at**  
**<http://www.cdc.gov/tb/statistics/>**

**Access to the TB control offices for individual reporting areas may be found at:**  
**<http://www.cdc.gov/tb/links/tboffices.htm>**



# Contents

|                                                  |     |
|--------------------------------------------------|-----|
| Acknowledgments.....                             | vii |
| Preface.....                                     | ix  |
| Previous Statistical Reports in this Series..... | xi  |
| Executive Commentary.....                        | 3   |
| Technical Notes.....                             | 9   |

## Morbidity Trend Tables

|                                                                                                                                                                              |    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Table 1. Tuberculosis Cases, Case Rates per 100,000 Population, Deaths, and Death Rates per 100,000 Population, and Percent Change: United States, 1953–2012.....            | 17 |
| Table 2. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Hispanic Ethnicity and non-Hispanic Race: United States, 1993–2012 .....                  | 18 |
| Table 3. Tuberculosis Cases and Percentages by Hispanic Ethnicity and non-Hispanic Race, and Origin of Birth: United States, 1993–2012 .....                                 | 19 |
| Table 4. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Age Group: United States, 1993–2012.....                                                  | 20 |
| Table 5. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Origin of Birth: United States, 1993–2012 .....                                           | 21 |
| Table 6. Tuberculosis Cases and Percentages Among Foreign-born Persons by the Top 30 Countries of Birth: United States, 2008–2012 .....                                      | 22 |
| Table 7. Tuberculosis Cases and Percentages by Case Verification Criterion and Site of Disease: United States, 1993–2012 .....                                               | 23 |
| Table 8. Tuberculosis Cases and Percentages, by Resistance to INH, Origin of Birth, and Previous History of TB: United States, 1993–2012 .....                               | 24 |
| Table 9. Tuberculosis Cases and Percentages, by Multidrug Resistance, Origin of Birth, and Previous History of TB: United States, 1993–2012.....                             | 25 |
| Table 10. Percentages of Tuberculosis Cases by Initial Drug Regimen, Use of Directly Observed Therapy (DOT), and Completion of Therapy (COT): United States, 1993–2012 ..... | 26 |
| Table 11. Tuberculosis Cases and Percentages in Persons with HIV Test Results and with HIV Coinfection, by Age Group: United States, 1993–2012 .....                         | 27 |
| Table 12. Tuberculosis Cases and Percentages by Reason Tuberculosis Therapy Stopped: United States, 1993–2010 .....                                                          | 28 |

|                                                                                                                                |    |
|--------------------------------------------------------------------------------------------------------------------------------|----|
| Table 13. National Tuberculosis Genotyping Surveillance Coverage:<br>United States, 2004–2012 .....                            | 29 |
| Table 14. National Tuberculosis Genotyping Surveillance Coverage:<br>United States Affiliated Pacific Islands, 2004–2012 ..... | 30 |
| Table 15. Genotyped Tuberculosis Cases with <i>Mycobacterium bovis</i> by Origin of Birth:<br>United States, 2004–2012 .....   | 31 |

## **Morbidity Tables, 2012**

|                                                                                                                                                                                        |    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Table 16. Tuberculosis Cases and Percentages Among Foreign-born Persons by the Top 30 Countries of Birth and Years in the United States Before TB Diagnosis: United States, 2012 ..... | 35 |
| Table 17. Tuberculosis Cases and Rates per 100,000 Population by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2012 .....                               | 36 |
| Table 18. Tuberculosis Cases in U.S.-born Persons by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2012.....                                            | 38 |
| Table 19. Tuberculosis Cases in Foreign-born Persons by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2012.....                                         | 39 |
| Table 20. Tuberculosis Cases Among Foreign-born Persons by Country of Birth:<br>United States, 2012 .....                                                                              | 40 |
| Table 21. Tuberculosis Risk Factors by Origin and Race/Ethnicity: United States, 2012.....                                                                                             | 42 |
| Table 22. Epidemiologic Characteristics of Cases in GENType Clusters by Alert Levels Based on Log-likelihood Ratios (LLR): United States, 2010–2012.....                               | 44 |
| Table 23. Tuberculosis Cases by Cluster Status: United States, 2010–2012 .....                                                                                                         | 46 |
| Table 24. Tuberculosis Cases and Clusters by Cluster Size: United States, 2010–2012 .....                                                                                              | 47 |
| Table 25. Ten Most Frequently Reported GENTypes Among Genotyped Tuberculosis Cases:<br>United States, 2010–2012 .....                                                                  | 48 |
| Table 26. Five Most Frequently Reported GENTypes Among Genotyped Tuberculosis Cases:<br>United States Affiliated Pacific Islands, 2010–2012 .....                                      | 49 |

## **Morbidity Tables, 2010**

|                                                                                                                                 |    |
|---------------------------------------------------------------------------------------------------------------------------------|----|
| Table 27. Tuberculosis Cases and Percentages by Reason Tuberculosis Therapy Stopped and Type of Move: United States, 2010 ..... | 53 |
| Table 28. Deaths Prior to Tuberculosis Diagnosis or During Tuberculosis Therapy by Age Group: United States, 2010.....          | 54 |

|                                                                            |    |
|----------------------------------------------------------------------------|----|
| Table 29. Sputum Culture Conversion by Age Group: United States, 2010..... | 55 |
|----------------------------------------------------------------------------|----|

## **Morbidity Tables, Reporting Areas, 2012**

|                                                                                                                                                                               |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Table 30. Tuberculosis Cases and Case Rates per 100,000 Population:<br>Reporting Areas, 2012 and 2011 .....                                                                   | 59 |
| Table 31. Tuberculosis Cases and Case Rates per 100,000 Population, Ranked and Grouped by<br>Number of Cases: United States and the District of Columbia, 2012 and 2011 ..... | 60 |
| Table 32. Tuberculosis Cases and Percentages by Age Group: Reporting Areas, 2012 .....                                                                                        | 62 |
| Table 33. Tuberculosis Cases and Percentages by Hispanic Ethnicity and Non-Hispanic Race:<br>Reporting Areas, 2012 .....                                                      | 64 |
| Table 34. Tuberculosis Cases and Percentages, U.S.-born and Foreign-born Persons:<br>United States, 2012 .....                                                                | 66 |
| Table 35. Tuberculosis Cases and Percentages in Foreign-born Persons by Top 7 Countries of<br>Birth: Reporting Areas, 2012 .....                                              | 68 |
| Table 36. Tuberculosis Cases and Percentages in Foreign-born Persons by Immigration Status at<br>First Entry: Reporting Areas, 2012 .....                                     | 70 |
| Table 37. Tuberculosis Cases and Percentages in Foreign-born Persons by Number of Years in<br>the United States: Reporting Areas, 2012 .....                                  | 72 |
| Table 38. Tuberculosis Cases and Percentages by Pulmonary and Extrapulmonary Disease:<br>Reporting Areas, 2012 .....                                                          | 73 |
| Table 39. Extrapulmonary Tuberculosis Cases and Percentages by Site of Disease:<br>Reporting Areas, 2012 .....                                                                | 74 |
| Table 40. Tuberculosis Risk Factors: Reporting Areas, 2012 .....                                                                                                              | 76 |
| Table 41. Primary Reasons for Tuberculosis Evaluation: Reporting Areas, 2012 .....                                                                                            | 78 |
| Table 42. Tuberculosis Cases and Percentages by Residence in and Type of Correctional Facili-<br>ties, Age >15: Reporting Areas, 2012 .....                                   | 80 |
| Table 43. Tuberculosis Cases and Percentages by Homeless Status, Age >15:<br>Reporting Areas, 2012 .....                                                                      | 82 |
| Table 44. Tuberculosis Cases and Percentages by Residence in Long-term Care Facilities,<br>Age >15: Reporting Areas, 2012 .....                                               | 83 |
| Table 45. Tuberculosis Cases and Percentages by Injecting Drug Use, Age >15:<br>Reporting Areas, 2012 .....                                                                   | 84 |
| Table 46. Tuberculosis Cases and Percentages by Noninjecting Drug Use, Age >15:<br>Reporting Areas, 2012 .....                                                                | 85 |

|                                                                                                                                                                              |    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Table 47. Tuberculosis Cases and Percentages by Excess Alcohol Use, Age >15:<br>Reporting Areas, 2012 .....                                                                  | 86 |
| Table 48. Tuberculosis Cases and Percentages by Primary Occupation, Age >15:<br>Reporting Areas, 2012 .....                                                                  | 87 |
| Table 49. Tuberculosis Cases and Percentages by Initial Drug Regimen:<br>Reporting Areas, 2012 .....                                                                         | 88 |
| Table 50. Culture-Positive Tuberculosis Cases and Percentages with Drug Susceptibility Results,<br>by Resistance to INH or Multidrug Resistance: Reporting Areas, 2012 ..... | 89 |
| Table 51. Tuberculosis Cases and Percentages by HIV Status: Reporting Areas, 2012 .....                                                                                      | 90 |
| Table 52. Tuberculosis Diagnostic Tests by Type of Laboratory: Reporting Areas, 2012 .....                                                                                   | 92 |
| Table 53. Tuberculosis Genotyping Surveillance Coverage: Reporting Areas, 2012 .....                                                                                         | 94 |
| Table 54. County-based Tuberculosis Genotype Clusters Based on GENType:<br>Reporting Areas, 2010–2012 .....                                                                  | 95 |

## **Morbidity Tables, Reporting Areas, 2010**

|                                                                                                                                                                     |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Table 55. Tuberculosis Cases and Percentages by Type of Health Care Provider:<br>Reporting Areas, 2010 .....                                                        | 98  |
| Table 56. Tuberculosis Cases and Percentages by Directly Observed Therapy (DOT):<br>Reporting Areas, 2010 .....                                                     | 99  |
| Table 57. Tuberculosis Cases and Percentages by Reason Therapy Stopped:<br>Reporting Areas, 2010.....                                                               | 100 |
| Table 58. Reason Therapy Was Extended Beyond 12 Months:<br>Reporting Areas, 2010.....                                                                               | 102 |
| Table 59. Completion of Tuberculosis Therapy (COT) Cases and Percentages by Hispanic<br>Ethnicity and Non-Hispanic Race: Reporting Areas, 2010 .....                | 104 |
| Table 60. Tuberculosis Cases and Percentages by Completion of Tuberculosis Therapy (COT):<br>Reporting Areas, 2010 .....                                            | 106 |
| Table 61. Tuberculosis Cases and Percentages in Persons Completing Therapy for Whom<br>Therapy Was Indicated for One Year or Less: Reporting Areas, 2006–2010 ..... | 107 |

## **Morbidity Tables, Cities and Metropolitan Statistical Areas, 2012**

|                                                                                                                                                     |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Table 62. Tuberculosis Cases in Selected Cities: 2012 and 2011 .....                                                                                | 109 |
| Table 63. Tuberculosis Cases and Case Rates per 100,000 Population: Metropolitan Statistical<br>Areas with >500,000 Population, 2012 and 2011 ..... | 110 |

|                                                                                                                                                               |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Table 64. Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with >500,000 Population, 2012 .....                                                | 114 |
| Table 65. Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race: Metropolitan Statistical Areas with >500,000 Population, 2012 .....                 | 116 |
| Table 66. Tuberculosis Cases and Percentages, U.S.-born Persons and Foreign-born Persons: Metropolitan Statistical Areas with >500,000 Population, 2012 ..... | 118 |
| Table 67. Tuberculosis Cases and Percentages by Homeless Status, Age >15: Metropolitan Statistical Areas with >500,000 Population, 2012 .....                 | 120 |

## **Surveillance Slide Set, 2012**

|                 |     |
|-----------------|-----|
| Slides.....     | 125 |
| Narrative ..... | 161 |

## **Appendices**

|                                                                                                                                                       |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Appendix A: Tuberculosis Case Definition for Public Health Surveillance .....                                                                         | 169 |
| Appendix B: Recommendations for Counting Reported Tuberculosis Cases .....                                                                            | 170 |
| Appendix C: National Surveillance for Severe Adverse Events Associated with Treatment for Latent Tuberculosis Infection - Reporting Information ..... | 179 |
| Appendix D: Genotyping Background Information and Glossary .....                                                                                      | 180 |

# **Executive Commentary**



# Executive Commentary

## Highlights of 2012 Report

Since 1953, in cooperation with state and local health departments, the United States national tuberculosis program has collected information on each newly reported case of tuberculosis (TB) disease in the United States. Currently, each individual TB case report (Report of Verified Case of Tuberculosis or RVCT) is submitted electronically. Following are the highlights of the 2012 report.

1. Updated case counts for each year from 1993 through 2011.
2. Case counts: 9,945 TB cases were reported to CDC from the 50 states and the District of Columbia (DC) for 2012, representing a 5.4% decrease from 2011 (Table 1).
  - Seventeen states reported increased case counts from 2011 (Table 30).
  - California, Texas, New York, and Florida accounted for 50% of the national case total (Table 31).
  - Asians exceeded all other racial or ethnic groups with the largest percentage of total cases (30%) (Table 2).
  - Hispanics comprise the second largest racial or ethnic group (28%) (Table 2).
  - Blacks or African Americans born in the United States represented 37% of TB cases in U.S.-born persons (Table 18) and accounted for 13% of the national case total.
  - Asians born outside the United States represented 45% of TB cases in foreign-born persons (Table 19) and accounted for 29% of the national case total.
3. Case rates: In 2012, the TB case rate declined from 3.4 to 3.2 per 100,000 persons, representing a 5.9% decrease from 2011.
  - Ten states and DC reported rates above the national average (Table 30).
  - The TB case rate was 1.4 per 100,000 for U.S.-born persons and 15.9 for foreign-born persons (Table 5).
  - Asians continued to have the highest case rate (18.9 per 100,000 persons) among all racial or ethnic groups (Table 2).
4. Burden among the foreign-born: In 2012, the percentage of cases occurring in foreign-born persons increased to 63% of the national case total. This percentage has risen steadily since 1993. Foreign-born Hispanics and Asians together represented 79% of TB cases in foreign-born persons, and accounted for 50% of the national case total (Table 19).
  - In 31 states,  $\geq 50\%$  of TB cases occurred among foreign-born persons (Table 34).
  - In 8 states,  $\geq 70\%$  of TB cases occurred among foreign-born persons (Table 34).
  - In 3 states,  $\geq 75\%$  of TB cases occurred among foreign-born persons (Table 34).
  - The top five countries of origin of foreign-born persons with TB were Mexico, the Philippines, India, Vietnam, and China (Table 6).
5. Drug resistance: 1.1% of reported cases had primary multidrug resistance, which is defined as no previous history of TB disease and resistance to at least isoniazid and rifampin (Table 9). This percentage has remained stable, fluctuating from 0.9% to 1.3%, over the past decade.
6. HIV status: In 2012, 84% of persons with TB reported HIV test results.
  - The percentage of persons with HIV test results remained relatively stable between 2011 and 2012 at 83–84% among persons of all ages and 91–92% among persons 25–44 years of age (Table 11).
7. Genotype surveillance coverage: In 2012, genotype surveillance coverage was 94%.
  - Genotype surveillance coverage has increased steadily since 2004. Thirty-seven states met or exceeded the national target of 94% genotype surveillance coverage in 2012 (Table 13). Among genotyped cases during 2010–2012, 21% were clustered, suggesting recent transmission (Table 23).

## Tuberculosis in the United States

In 2012, the reported number of TB cases (9,945) and case rate (3.2 cases per 100,000) both decreased; these represented declines of 5.4% and 5.9%, respectively, compared to 2011. Since the 1992 TB resurgence peak in the United States, the number of TB cases reported annually has decreased by 63% (Table 1).

TB case rates vary by well-known factors such as age, race and ethnicity, and country of origin. The proportion of total cases occurring in foreign-born persons has been increasing since 1993. In 2012, 63% of TB cases occurred in foreign-born persons. Foreign-born persons have accounted for the majority of TB cases in the United States every year since 2001. Moreover, the case rate among foreign-born persons in 2012 was approximately 11 times higher than among U.S.-born persons (Table 5).

Tuberculosis deaths increased by 7.6%, from 529 deaths in 2009 to 569 deaths in 2010. The number of TB deaths reported annually has decreased by 66% since 1992 (Table 1).

### Age

Since 1993, TB case rates have declined annually for almost all age groups. In 2012, TB case rates continued the trend with declines in all age groups. The highest burden of disease continues to be among older adults. In 2012, adults aged 65 years and older had a case rate of 5.1 cases per 100,000, while children aged  $\leq$  14 years had the lowest rate at 0.8 cases per 100,000 (Table 4).

### Race and Ethnicity

In 2003, the race and ethnicity category “non-Hispanic, Asian or Pacific Islander” was split into “non-Hispanic Asian” and “non-Hispanic Native Hawaiian or Other Pacific Islander.” In 2012, Asians had the highest TB case rate at 18.9 cases per 100,000, which was a slight decrease from 20.2 in 2011. Native Hawaiians or Other Pacific Islanders had the second-highest TB case rate at 12.3 cases per 100,000, which is a decrease compared to 15.9 cases per 100,000 reported in 2011. Owing to low case numbers among Native Hawaiians or other Pacific Islanders, case rates fluctuate and must be interpreted with caution (Table 2).

Since 1993, TB case rates have declined in almost all racial and ethnic groups: among Hispanic or Latinos, the decline has been from 19.9 to 5.3 cases per 100,000 (-54%); among non-Hispanic blacks or African Americans, from 28.5 to 5.8 cases per 100,000 (-80%); among American Indian or Alaska Natives, from 14.0 to 6.3 cases per 100,000 (-55%); among non-Hispanic whites, from 3.6 to 0.8 cases per 100,000 (-78%); and

among Asians, from 41.2 to 18.9 cases per 100,000 (-54%). In 2012, the TB case rate for Asians remained approximately three times higher than that for Hispanics or blacks or African Americans (Table 2).

### Origin of Birth

Since 1993, the TB case rate among U.S.-born persons has declined annually. In 2012, the TB case rate for U.S.-born persons was 1.4 cases per 100,000, representing an 81% decrease from 7.4 cases per 100,000 in 1993. The TB case rate among foreign-born persons also declined during the same interval, though the decline was less substantial. In 2012, the TB case rate among foreign-born persons was 15.9 cases per 100,000, representing a 53% decrease from 34.0 cases per 100,000 in 1993 (Table 5).

The proportion of TB cases among persons born in the United States has also declined annually since 1993. In 2012, 37% of TB cases were among U.S.-born persons compared to 69% in 1993 (Table 5). In 31 states,  $\geq$  50% of TB cases occurred among foreign-born persons. In 18 states (Arizona, California, Connecticut, Hawaii, Idaho, Kansas, Maryland, Massachusetts, Minnesota, Nevada, New Hampshire, New Jersey, New York, Oregon, Utah, Vermont, Virginia, Washington),  $\geq$  70% of TB cases occurred among foreign-born persons (Table 34).

### Country of Origin and World Region

From 2007 through 2012, the top five countries of origin of foreign-born persons with TB were Mexico, the Philippines, India, Vietnam, and China (Table 6). The distribution of TB cases by world region of origin reflects immigration patterns among persons settling in the United States.<sup>1</sup> Of the 6,274 TB cases reported among foreign-born persons in 2012, 42% occurred among persons born in the Americas region, and 23% occurred among persons born in the Western Pacific region (Table 20). From 1993 through 2012, the proportion of cases increased among persons born in the Eastern Mediterranean region (3% in 1993 to 4% in 2012), the Southeast Asia region (6% in 1993 to 15% in 2012), and the Africa region (2% in 1993 and 9% in 2012) (Table 20).

### Multidrug-resistant Tuberculosis

From 1993, when the RVCT was expanded to include drug-susceptibility results, the proportion of patients with primary multidrug-resistant (MDR) TB, which is defined as no previous history of TB disease and resistance to at least isoniazid and rifampin, decreased from 3% to 1% by 1998. During 2009 through 2012, the per-

<sup>1</sup> United States Department of Homeland Security. 2010 Yearbook of Immigration Statistics. In: U.S. Department of Homeland Security, Office of Immigration Statistics; 2011.

centage of primary MDR TB cases has remained stable at approximately 1%. Since 1997, the percentage of U.S.-born patients with primary MDR TB has remained below 1%. However, of the total number of reported primary MDR TB cases, the proportion occurring in foreign-born persons increased from 25% (103 of 407) in 1993 to 86% (62 of 72) in 2012 (Table 9).

### **Extensively Drug-resistant Tuberculosis**

CDC has included an updated case count of extensively drug-resistant (XDR) TB cases from 1993 to 2012 in the slide set that accompanies this report. XDR TB is defined as resistance to isoniazid and rifampin, plus resistance to any fluoroquinolone and at least one of three injectable second-line anti-TB drugs (i.e., amikacin, kanamycin, or capreomycin).<sup>2,3</sup> Two cases were reported as XDR TB in 2012, compared to 6 cases in 2011, 1 case in 2010, 0 cases in 2009, and 5 in 2008. Of the 14 XDR TB cases reported since 2008, 13 were among foreign-born persons.

### **Tuberculosis Therapy**

The proportion of TB patients prescribed an initial treatment regimen including at least isoniazid, rifampin, and pyrazinamide increased from 72% in 1993 to 87% in 2012. The proportion of patients who completed therapy within 1 year increased from 64% in 1993 to 88% in 2010 (the latest year for which complete outcome data are available). The proportion of persons receiving directly observed therapy for at least a portion of the treatment duration also increased from 36% in 1993 to 90% in 2010, the latest year for which complete outcome data are available (Table 10).

### **HIV Status**

Between 2011 and 2012, the proportion of persons with TB who reported HIV test results has remained high at 83–84% for all ages and 91–92% for persons aged 25–44 (Table 11). The percentage of persons with TB who reported HIV test results and who were HIV-positive was 7% in 2012, representing a decline from 8% in 2011 (Table 11). Among persons 25–44 years of age, 12% of persons with TB who reported HIV test results were HIV-positive in 2012, increasing from 11% in 2011 (Table 11). The percentages have declined since 1993, when 49% of persons with TB of all ages with HIV test results reported HIV-positive results; among persons between 25–44 years of age, the percentage

<sup>2</sup> Centers for Disease Control and Prevention. Revised Definition of Extensively Drug-Resistant Tuberculosis. MMWR Morb Mortal Wkly Rep 2006;55:1176.

<sup>3</sup> Extensively drug-resistant tuberculosis (XDR-TB): recommendations for prevention and control. Wkly Epidemiol Rec 2006;81:430-2.

was 64% in 1993 (Table 11). The American Thoracic Society and the Infectious Diseases Society of America recommend that all TB patients be counseled and tested for HIV.<sup>4</sup>

### **Genotyping**

TB genotyping is a laboratory-based analysis of the genetic material of the bacteria that cause TB disease. In the United States, routine genotyping of isolates from culture-positive TB cases started in 2004 by CDC's National Tuberculosis Genotyping Service (NTGS). TB genotyping surveillance coverage, defined as the proportion of culture-positive TB cases with a genotype result, has increased from 53% in 2004 to 94% in 2012 (Table 13). TB genotype clusters are defined as two or more cases with matching genotypes in the same county during a 3-year time period. Cases that are clustered suggest recent transmission, while unique cases are more likely attributable to reactivation of disease that was acquired in the past. Among genotyped cases during 2010–2012, 21% were clustered (Table 23). During this period, the percentage of clustered cases among U.S.-born persons with TB was 34%, compared to 14% among foreign-born persons with TB (Table 22). In 2012, 1.7% of genotyped cases were due to infections with *Mycobacterium bovis*; most were in foreign-born persons (Table 15).

### **United States Affiliated Pacific Islands (USAPI)**

The USAPI consist of six jurisdictions in the Pacific Ocean: American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, Federated States of Micronesia, Republic of the Marshall Islands, and Republic of Palau. As a result of their affiliations with the United States, the USAPI are among the recipients of U.S. federal government funding, including CDC cooperative agreement funding for domestic TB control program activities. In 2012, the USAPI had 416 reported cases of TB. Among these, 224 (54%) were male, 102 (25%) were aged less than 15 years and 117 (28%) were aged 25–44 years. In addition, 61 (15%) were not born in the USAPI jurisdictions or the United States, and of those, 50 (82%) emigrated from the Republic of the Philippines. Some other data highlights of the 416 reported USAPI cases are that 332 (80%) were diagnosed with pulmonary disease only, 185 (44%) were positive culture for *Mycobacterium tuberculosis*, 4 (1%) had MDR TB, and 150 (36%) were unemployed. Genotype surveillance coverage for USAPI was 79% in 2012.

<sup>4</sup> CDC. Treatment of tuberculosis. American Thoracic Society, CDC, and Infectious Diseases Society of America. MMWR 2003;52(No. RR-11).

## Puerto Rico

In 2012, the Commonwealth of Puerto Rico reported 71 TB cases to CDC, a case rate of 1.9 per 100,000 persons. Among those cases, 52 (73%) were male, three (4%) were aged less than 25 years, and 50 (70%) were aged 45 years and older. Of the 71 reported cases, nine were born outside of Puerto Rico, and of those, seven (78%) emigrated from the Dominican Republic. The majority of reported cases (86%) were diagnosed with pulmonary disease only, 87% were positive culture for *Mycobacterium tuberculosis*, 1% had MDR TB, and 35% were unemployed. Genotype surveillance coverage for Puerto Rico was 90% in 2012.

## Summary

Both the absolute number of TB cases and the TB case rate in the United States continued to decrease in 2012. With 9,945 total cases, representing a case rate of 3.2 cases per 100,000 persons, 2012 had the lowest number of reported TB cases since reporting began in 1953. Furthermore, the number of TB cases reported in 2012 and the corresponding case rate decreased by approximately 5–6% from the previous year. However, despite successful declines in TB cases and case rates over the past 60 years, it is unlikely that current TB control and prevention efforts will result in TB elimination (<1 case per 1,000,000 population)<sup>5</sup> in this century.<sup>6</sup>

As TB incidence declines, achieving elimination will depend on both reducing transmission of TB in the United States and controlling the importation of TB through immigration and international travel. Genotyping, a laboratory-based analysis of the genetic material of the bacteria that cause TB disease, is useful for distinguishing between these two sources of future TB cases and can help inform public health interventions. Cases occurring in genotype clusters suggest recent transmission and populations in which clustering is more common may benefit from intensified interventions to reduce transmission. For instance, during 2010–2012, clustering was higher among cases in persons reported as homeless compared to those who were not (44% versus 20%), among persons who drank alcohol excessively compared to those who did not (37% versus 19%), and among those who reported illicit drug use compared to those who did not (39% versus 21% for injecting drug use, 43% versus 19% for non-injecting drug use). Furthermore, among different racial and ethnic groups, American Indians and Alaskan

Natives had the highest proportion of clustered cases (49%), while Asians had the lowest (12%). Finally, the proportion of clustered cases was higher among U.S.-born persons than among foreign-born persons (34% versus 14%).

The small proportion of genotypically clustered TB cases in foreign-born persons suggests a large proportion of cases attributable to reactivation of disease acquired in the past. Since 2002, more than half of all TB cases reported in the U.S. have occurred among foreign-born persons. Focusing on LTBI testing and treatment of foreign-born persons would likely be more successful in decreasing TB among this group.<sup>7</sup>

Continuing the decline in TB cases in the United States will require sustained focus on domestic TB control activities and further support of global TB control initiatives.<sup>8</sup> Improving TB control among groups at high risk for transmission and foreign-born persons is imperative as the United States strives to achieve TB elimination.<sup>9</sup>

<sup>7</sup> Cain KP, Benoit SR, Winston CA, MacKenzie WR. Tuberculosis among foreign-born persons in the United States. *JAMA*. 2008;300(4):405-12.

<sup>8</sup> Centers for Disease Control and Prevention. Trends in tuberculosis – United States 2011. *MMWR Morb Mortal Wkly Rep* 2012;61(11):181-5.

<sup>9</sup> Centers for Disease Control and Prevention. CDC's response to ending neglect: the elimination of tuberculosis in the United States 2002. <http://www.cdc.gov/tb/publications/reportsarticles/iom/iomresponse/default.htm>.

# **Technical Notes**



# Technical Notes

## National Tuberculosis Surveillance System

Reporting areas (i.e., the 50 states, the District of Columbia, New York City, Puerto Rico, and other U.S. jurisdictions in the Pacific and Caribbean<sup>1</sup>) report tuberculosis (TB) cases to CDC's National TB Surveillance System (NTSS) using a standard case report form, Report of Verified Case of Tuberculosis (RVCT). TB cases are verified according to the Tuberculosis Case Definition for Public Health Surveillance in Appendix A. TB cases are reported and counted according to the Recommendations for Reporting and Counting Tuberculosis Cases in Appendix B.

### New features of the 2012 Report

The 2012 report has 20 new tables that feature data from new variables collected in the NTSS and from the Tuberculosis Genotyping Information Management System (TB GIMS):

- National Tuberculosis Genotyping Surveillance Coverage: United States, 2004–2012 (Table 13)
- National Tuberculosis Genotyping Surveillance Coverage: United States Affiliated Pacific Islands, 2004–2012 (Table 14)
- Genotyped Tuberculosis Cases with *Mycobacterium bovis* by Origin of Birth: United States, 2004–2012 (Table 15)
- Tuberculosis Risk Factors by Origin and Race/Ethnicity: United States, 2012 (Table 21)
- Epidemiologic Characteristics of Cases in GENType Clusters by Alert Levels Based on Log-likelihood Ratios (LLR): United States, 2010–2012 (Table 22)
- Tuberculosis Cases by Cluster Status: United States, 2010–2012 (Table 23)
- Tuberculosis Cases and Clusters by Cluster Size: United States, 2010–2012 (Table 24)
- Ten Most Frequently Reported GENTypes Among Genotyped Tuberculosis Cases: United States, 2010–2012 (Table 25)
- Five Most Frequently Reported GENTypes Among Genotyped Tuberculosis Cases: United States Affiliated Pacific Islands, 2010–2012 (Table 26)
- Tuberculosis Cases and Percentages by Reason Tuberculosis Therapy Stopped and Type of Move: United States, 2010 (Table 27)
- Deaths Prior to Tuberculosis Diagnosis or During Tuberculosis Therapy by Age Group: United States, 2010 (Table 28)

- Sputum Culture Conversion by Age Group: United States, 2010 (Table 29)
- Tuberculosis Cases and Percentages in Foreign-born Persons by Immigration Status at First Entry: Reporting Areas, 2012 (Table 36)
- Tuberculosis Risk Factors: Reporting Areas, 2012 (Table 40)
- Primary Reasons for Tuberculosis Evaluation: Reporting Areas, 2012 (Table 41)
- Tuberculosis Cases and Percentages by Residence in and Type of Correctional Facilities, Age > 15: Reporting Areas, 2012 (Table 42)
- Tuberculosis Diagnostic Tests by Type of Laboratory: Reporting Areas, 2012 (Table 52)
- Tuberculosis Genotyping Surveillance Coverage: Reporting Areas, 2012 (Table 53)
- County-based Tuberculosis Genotype Clusters Based on GENType: Reporting Areas, 2010–2012 (Table 54)
- Reason Therapy Was Extended Beyond 12 Months: Reporting Areas, 2010 (Table 58)

## TB Case Definition

In 2009, the case definition was modified. TB cases are verified according to the following specified laboratory and clinical criteria.

### Laboratory criteria for diagnosis

A case may be verified by the laboratory case definition with at least one of the following criteria: 1) isolation of *M. tuberculosis* complex from a clinical specimen, OR 2) demonstration of *M. tuberculosis* complex from a clinical specimen by nucleic acid amplification test (NAAT), OR 3) demonstration of acid-fast bacilli (AFB) in a clinical specimen when a culture has not been or cannot be obtained or is falsely negative or contaminated.

### Clinical case criteria

A case may be verified by the clinical case definition in the presence of ALL of the following clinical criteria: 1) a positive tuberculin skin test (TST) result or positive interferon gamma release assay (IGRA) result for *M. tuberculosis*, AND 2) other signs and symptoms compatible with TB (e.g., abnormal chest radiograph, abnormal chest computerized tomography scan or other chest imaging study, or clinical evidence of current disease, AND 3) treatment with two or more anti-TB drugs, AND 4) a completed diagnostic evaluation.

## Provider Diagnosis

Provider diagnosis is not a component of the case definition for TB as described in Appendix A. However,

<sup>1</sup>Other U.S. jurisdictions include American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, the Republic of Palau, and U.S. Virgin Islands.

when cases of TB are diagnosed but do not meet either the clinical or laboratory case definition, reporting areas have the option of verifying TB cases based on provider diagnosis as described in Appendix B. Through 2008, the RVCT did not collect information on IGRA results. If an IGRA was performed in lieu of the TST, then the RVCT would have indicated that the TST was not performed. Thus, culture- and smear-negative cases without a TST that are diagnosed by a positive IGRA result prior to 2008 were considered to have been confirmed by provider diagnosis. However, starting in 2009, positive results for an IGRA are included as part of the clinical case definition for TB confirmation. Anergic patients with a clinical presentation consistent with TB but without laboratory evidence of *M. tuberculosis* complex would also be an example of provider diagnosis and one which has not changed over time.

#### **TB Case Verification Criteria Calculation**

The software for TB surveillance developed by CDC includes a calculated variable for TB case verification called “Vercrit,” which was modified in 2009. The new variables, **Nucleic Acid Amplification Test Result, Interferon Gamma Release Assay (IGRA) for *Mycobacterium tuberculosis* at Diagnosis, and Initial Chest CT Scan or Other Chest Imaging Study** were added in the Vercrit calculation.

“Vercrit” is calculated by using the following criteria in hierarchical order:

1. Positive culture
2. Positive nucleic acid amplification test
3. Positive acid-fast bacilli test
4. Clinical case confirmation
5. Provider diagnosis

#### **Changes in Reporting and Counting TB Cases**

In 2009, the Recommendations for Reporting and Counting Tuberculosis Cases in Appendix B were modified. TB cases that are verified but not countable for morbidity statistics can now be reported to CDC as a measure of programmatic and case management burden. However, data on noncountable TB cases are incomplete and not included in this report.

The recommendations for counting TB cases among immigrants, refugees, and foreign visitors were revised based on the recommendations in the 2007 Technical Instructions for Tuberculosis Screening and Treatment for Panel Physicians.<sup>2</sup> Regardless of Panel Physician

<sup>2</sup>CDC. *Immigration Requirements: Technical Instructions for Tuberculosis Screening and Treatment, 2007*. Atlanta: CDC, Division of Global Migration and Quarantine, revised September 2007; [http://www.cdc.gov/ncidod/dq/pdf/ti\\_tb\\_8\\_9\\_2007.pdf](http://www.cdc.gov/ncidod/dq/pdf/ti_tb_8_9_2007.pdf).

classification or citizenship status, immigrants and refugees examined after arriving in the United States and diagnosed with clinically active TB requiring anti-TB medications should be reported and counted by the locality of their current residence at the time of diagnosis. Foreign visitors diagnosed with TB, receiving anti-TB therapy, and planning to remain in the United States for 90 days or more should be reported and counted by the locality of current residence.

#### **New and Expanded RVCT Variables**

Data on demographic, clinical, laboratory, initial treatment, and treatment outcomes are collected through the RVCT’s three data collection reports:

1. Report of Verified Case of Tuberculosis: for all patients with a verified case of TB.
2. Initial Drug Susceptibility Report (Follow-Up Report 1): for all patients who had a culture that was positive for *M. tuberculosis* complex.
3. Case Completion Report (Follow-Up Report 2): for all patients who were alive when TB was diagnosed.

In 2009, the RVCT was modified and expanded to include 11 additional variables. Modifications to the RVCT accommodate the changing epidemiology of TB in terms of risk factors, new drug treatments, and enhanced laboratory capacity for diagnostic tests. The 2012 Report contains new tables reflecting the addition of these variables.

The instructions for completing the RVCT forms and the definitions for all data items are available at: CDC. Report of Verified Case of Tuberculosis (RVCT) Instruction Manual. Atlanta, GA: U.S. Department of Health and Human Services, CDC, 2009. <http://www.cdc.gov/tb/programs/rvct/InstructionManual.pdf>.

#### **Tabulation and Presentation of TB Data**

This report presents summary data for TB cases reported to CDC in 2012. TB cases are tabulated by year in which the reporting area verified that the patient had TB and included the patient in its official annual TB case count. Since 2004, the published report has reflected updated information on the numbers of cases of confirmed TB for each year from 1993 onward. Totals for the United States include data from the 50 states, the District of Columbia (DC), and New York City.

Trend data are presented in Tables 1 through 15. Age group tabulations are based on the patient’s age in the month and year the patient was reported to the health department as a suspected TB case. State or metro-

politan area data tabulations are based on the patient's residence at diagnosis of TB.

## Rates

Rates are expressed as the number of cases reported each calendar year per 100,000 persons. Population denominators used in calculating TB rates were based on official census and midyear postcensal estimates from the U.S. Census Bureau. In Tables 1, 30, and 31, the U.S. total populations for 2000–2009 were taken from the U.S. Census Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico (April 1, 2000 to July 1, 2009); populations for 2010–2012 were taken from the U.S. Census Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico (April 1, 2010 to July 1, 2012).

In 2003, two modifications were made to the RVCT form: 1) entries for multiple race (two or more races reported for a person) were allowed, and 2) the previous category of "Asian/Pacific Islander" was divided into "Asian" and "Native Hawaiian or Other Pacific Islander." To calculate rates in Table 2, denominators for 2000–2011 were obtained from the Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States (April 1, 2000 to July 1, 2009) and Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States (April 1, 2010 to July 1, 2012). The population source for nativity is the Current Population Survey and is used to calculate case rates for U.S. and foreign-born TB. This population source includes populations for the 50 states and D.C., those born abroad of U.S. parents, and those born in U.S. outlying areas (the U.S.-affiliated areas) as the U.S.-born population.

To calculate rates for Table 4, denominators were obtained from the Annual Estimates of the Resident Population by Sex and Five-Year Age Groups for the United States (April 1, 2000 to July 1, 2009) and Annual Estimates of the Resident Population for Selected Age Groups by Sex: (April 1, 2010 to July 1, 2012). Denominators for computing 2012 rates in Table 17 were obtained from U.S. Census Monthly Postcensal Resident Population, by single year of age, sex, race, and Hispanic origin. In 2004, the method for calculating the annual percentage change in the TB case rate was modified. Unrounded figures are applied to calculate the percentage change in the case rate.

In Table 5, the populations for U.S.-born and foreign-born persons for 1993 and 1994 were obtained from Quarterly Estimates of the United States Foreign-born

and Native Resident Populations: April 1, 1990–July 1, 1999. Denominators for computing the 1995–2012 rates were based on extrapolations from the U.S. Census Current Population Survey (July Supplement).

## Mortality Data

Official TB mortality statistics for the United States are compiled by the National Center for Health Statistics (NCHS), CDC. The annual mortality rate is calculated as the number of deaths due to TB in that year, divided by the estimated population for the year, multiplied by 100,000 (Table 1). The number of deaths for 2010 was obtained from the NCHS, National Vital Statistics Report, Vol. 61, No. 4, May 8, 2013. The finalized numbers of deaths for 2011 and 2012 were not available at the time of this publication.

## Drug Resistance

Drug-resistance patterns are displayed in separate tables with drug-resistance trend data by previous TB status and origin of birth. Isoniazid (INH) resistance and multidrug resistance (MDR) are shown in Tables 8 and 9, respectively.

## Completion of Tuberculosis Therapy

Tables 10, 59, 60, and 61 present rates of completion of TB therapy (COT). Data collected by RVCT Follow Up Report-2 on date and reason therapy stopped (e.g., patient completed therapy) were used to calculate rates of COT. Cases were stratified by the indicated length of therapy, based on American Thoracic Society/CDC/Infectious Diseases Society of America treatment guidelines<sup>3</sup> in effect during the period covered, and the patient's initial drug-susceptibility test results, age, and site of disease.

In Table 60, the first column shows the total number of cases reported during 2010. The remaining columns are grouped under three headings: therapy of 1 year or less indicated therapy, greater than 1 year indicated, and overall. Patients eligible to complete therapy within 1 year had to have been alive at diagnosis, and initiated therapy with at least one drug. Eligible patients did not have rifampin resistance, did not die during therapy, did not move out of country during treatment, and did not have meningeal TB, regardless of age. In addition, TB patients under the age of 15 were not eligible to complete therapy within 1 year if they had disseminated disease (defined as miliary tuberculosis and/or a positive tuberculosis blood culture). Patients with culture-negative disease, those with an unknown culture status,

<sup>3</sup> CDC. Treatment of Tuberculosis, American Thoracic Society, CDC, and the Infectious Diseases Society of America. *MMWR* 2003;52(No.RR-11):1-77.

and those with culture-positive disease but unknown initial drug-susceptibility test results were included under the category of 1 year or less of therapy indicated.

In Table 60, each group under an indicated length of therapy has an initial column showing the number of cases in persons who were alive at diagnosis and prescribed an initial regimen of one or more drugs, and who did not die during therapy. This number was used as the denominator in COT rate calculations.

COT rates, shown as percentages, were only calculated for areas reporting reason therapy stopped for at least 90% of cases shown in the overall column. For the group with an indicated length of therapy of 1 year or less, rates are shown for both COT in 1 year or less ( $\text{COT} \leq 1$  year) and for COT, regardless of duration (i.e., duration of therapy  $\leq 1$  year,  $> 1$  year, or unknown). For  $\text{COT} \leq 1$  year, the numerator included only those patients completing therapy in  $\leq 366$  days (based on the dates therapy started and stopped). Patients with missing dates were classified as “treatment not completed” for this calculation.

Rates of COT, regardless of duration, were calculated by dividing the number of patients reported as having completed therapy by the number of total eligible patients. Patients with an outcome other than completed therapy (i.e., moved, lost, refused treatment, or other) were classified as “treatment not completed.” Patients with an unknown outcome were also classified as “treatment not completed.” For the remaining two groups of indicated therapy length ( $> 1$  year and overall), only rates of COT, regardless of duration, are presented. Table 10 provides rates for  $\text{COT} \leq 1$  year and for COT, regardless of duration, only for the group with an indicated therapy of  $\leq 1$  year. Table 59 presents rates of COT by ethnicity and non-Hispanic race and by state for those in whom therapy  $\leq 1$  year was indicated.

Because streptomycin is no longer being used as part of the standard treatment for TB disease, streptomycin has been removed from the calculated variable for initial drug regimen. Consequently, a separate column for the treatment regimen of isoniazid, rifampin, pyrazinamide (IRZ), ethambutol, streptomycin (E/S) is no longer reported in Tables 10 and 49.

### Site of TB Disease

Miliary disease is classified as both an extrapulmonary and a pulmonary form of TB (Tables 7, 38, and 39). In publications prior to 1997, miliary disease was classified as extrapulmonary TB unless pulmonary disease was reported as the major site of TB disease. Begin-

ning in 2009, miliary disease could not be classified as a site of TB disease because it is a clinical or radiologic finding and should be recorded under **Initial Chest Radiograph, Initial Chest CT Scan, or Other Chest Imaging Study**.

### Reporting of HIV Status

Information on HIV status for persons with TB is shown in Tables 11 and 51; Table 11 additionally shows trend data for persons aged 25–44 years. The completeness of reporting on HIV status among persons with TB has significantly improved to 92% of TB cases tested among persons aged 25–44 years in 2012; however, this variable is still underreported among jurisdictions. Data on the HIV-infection status of persons with reported TB cases should be interpreted with caution. These data are not representative of all TB patients with HIV infection.

HIV testing is performed after a patient receives counseling and gives informed consent. TB patients who are tested anonymously may choose not to share the results of HIV testing with their health care provider. TB patients managed in the private sector may receive confidential HIV testing, but results may not be reported to the TB program in the health department. In addition, many factors may influence HIV testing of TB patients, including the extent to which testing is targeted or routinely offered to specific groups (e.g., 25- to 44-year-old males, injecting drug users, homeless persons), and the availability of and access to HIV testing services. These data may overrepresent or underrepresent the proportion of TB patients known to be HIV infected in a reporting area.

### Primary Occupation for the Past Year

Table 48 now reflects the new 2009 RVCT variable, **Primary Occupation Within the Past Year**, which replaces the **Occupation Within Past 24 months of TB Diagnosis** in previous reports. Following the 2009 RVCT revision, “Multiple Occupation” was removed and the “Retired” and “Not Seeking Employment” categories were added.

### Reason Therapy Stopped

Tables 12 and 57 report a new 2009 RVCT data entry option; these tables now include a patient’s adverse reaction to anti-TB drug therapy as an option for the reason therapy stopped. The 2009 RVCT revision removed the option of “Moved” as a valid response to the variable **Reason Therapy Stopped** and this option is not reported after 2009.

### Metropolitan Statistical Areas

Tables 63 through 67 present data by metropolitan statistical areas (MSAs) with an estimated 2012 population of 500,000 or more. MSAs are defined by the federal Office of Management and Budget, and the definitions were based on the application of the 2010 OMB standards to 2010 Census and 2006–2010 American Community Survey data announced as of February 2013 (<http://www.whitehouse.gov/sites/default/files/omb/bulletins/b-13-01.pdf>).

The MSA definitions apply to all areas except the six New England states; for these states, the New England County Metropolitan Areas (NECMAs) are used. MSAs are named for a central city in the MSA or NECMA, may include several cities and counties, and may cross state boundaries. For example, the TB cases and case rates presented for the District of Columbia in Table 30 include only persons residing within the geographic boundaries of the District. However, the TB cases and case rates for the Washington, D.C., MSA (Table 63) include persons residing within the several counties in the metropolitan area, including counties in Maryland, Virginia, and West Virginia.

A city/MSA with incomplete or unavailable data was not included in the tables and some cities' or MSAs' total numbers may be underreported owing to missing information.

#### National Tuberculosis Genotyping Service (NTGS)

NTGS laboratories primarily use two genotyping methods: spoligotyping and MIRU–VNTR. Both methods require only a small amount of culture material, provide digital results, and are relatively quick. IS6110-restriction fragment length polymorphism (IS6110-RFLP) and retrospective 24-locus MIRU-VNTR for older isolates can be performed, if requested, and may help in further differentiating genotype clusters. All isolates are prepared for long-term storage at genotyping laboratories or CDC.

#### Tuberculosis Genotyping Information Management System (TB GIMS)

In March 2010, TB GIMS was launched by CDC as a secure Web-based system to support ongoing use of TB genotyping data in TB control activities. TB GIMS facilitates systematic data collection of TB genotyping results and integrates genotyping results with epidemiologic data collected by the National TB Surveillance System (NTSS) to form a national and centralized database. Primary users of TB GIMS include TB laboratories that submit isolates for genotyping, national CDC-contracted genotyping laboratories, state and local TB control programs, and CDC that apply this informa-

tion for TB control activities.

Genotyping results from the national genotyping laboratories or CDC are uploaded into TB GIMS as they become available. Line-listed data from the National TB Surveillance System are also uploaded into TB GIMS weekly. Once genotyping results have been linked to individual patient surveillance data in TB GIMS, the record is considered complete. Complete records are essential for most of the applications of TB genotyping, including all reports and maps as well as using the outbreak detection system to identify potential chains of transmission and outbreaks.

There have been 13 system updates adding new reports, data management functions, and other tools since TB GIMS was released in March 2010. As of June 2013, there were 446 local, state, and federal users of the system.

#### Genotype Clustering

A genotype cluster consists of two or more cases in a jurisdiction during a specified time period with *M. tuberculosis* isolates that share matching genotypes. The jurisdiction and time period used vary based on the specific application. Cases that are part of the same genotype cluster are likely to be related by TB transmission in some way; however, the cases may not be directly related (i.e., one case did not necessarily give TB to another case in the cluster) or recently related (i.e., both cases may have gotten TB from the same person, but the exposure may have happened years ago). Therefore, while we use genotype clustering to identify likely TB transmission, transmission must be confirmed using field data from contact investigations or other sources. In TB GIMS, clustering is defined as 2 or more cases with matching genotypes (spoligotype and 24-locus MIRU-VNTR) in a single county within a 3-year time period.

#### *Mycobacterium bovis*

*Mycobacterium bovis* can be defined on the basis of spoligotyping results; spoligotyping is a tool for differentiating *M. bovis* from *M. tuberculosis*. The spoligotyping-based definition requires either (1) the absence of spacers 3, 9, 16, and 39–43; the presence of at least 1 of the spacers 29–32; and the presence of at least 1 of the spacers 33–36; or (2) the absence of spacers 3, 9, 16, and 39–43 and 2 copies of the repeated sequence at MIRU locus 24.



# **Morbidity Trend Tables**



**Table 1. Tuberculosis Cases, Case Rates per 100,000 Population, Deaths, and Death Rates per 100,000 Population, and Percent Change: United States, 1953–2012**

| Year              | Tuberculosis Cases |      |                |       |                     | Tuberculosis Deaths |                |       |        |      |
|-------------------|--------------------|------|----------------|-------|---------------------|---------------------|----------------|-------|--------|------|
|                   | Number             | Rate | Percent Change |       | Number <sup>1</sup> | Rate <sup>1</sup>   | Percent Change |       | Number | Rate |
|                   |                    |      | Number         | Rate  |                     |                     | Number         | Rate  |        |      |
| 1953              | 84,304             | 52.6 | --             | --    | 19,707              | 12.4                | --             | --    | --     | --   |
| 1954              | 79,775             | 48.9 | -5.4           | -7.0  | 16,527              | 10.2                | -16.1          | -17.7 |        |      |
| 1955              | 77,368             | 46.6 | -3.0           | -4.7  | 15,016              | 9.1                 | -9.1           | -10.8 |        |      |
| 1956              | 69,895             | 41.4 | -9.7           | -11.1 | 14,137              | 8.4                 | -5.9           | -7.7  |        |      |
| 1957              | 67,149             | 39.0 | -3.9           | -5.8  | 13,390              | 7.8                 | -5.3           | -7.1  |        |      |
| 1958              | 63,534             | 36.3 | -5.4           | -6.9  | 12,417              | 7.1                 | -7.3           | -9.0  |        |      |
| 1959              | 57,535             | 32.4 | -9.4           | -10.7 | 11,474              | 6.5                 | -7.6           | -8.5  |        |      |
| 1960              | 55,494             | 30.7 | -3.5           | -5.2  | 10,866              | 6.0                 | -5.3           | -7.7  |        |      |
| 1961              | 53,726             | 29.2 | -3.2           | -4.9  | 9,938               | 5.4                 | -8.5           | -10.0 |        |      |
| 1962              | 53,315             | 28.6 | -0.8           | -2.1  | 9,506               | 5.1                 | -4.3           | -5.6  |        |      |
| 1963              | 54,042             | 28.6 | 1.4            | 0.0   | 9,311               | 4.9                 | -2.1           | -3.9  |        |      |
| 1964              | 50,874             | 26.5 | -5.9           | -7.3  | 8,303               | 4.3                 | -10.8          | -12.2 |        |      |
| 1965              | 49,016             | 25.2 | -3.7           | -4.9  | 7,934               | 4.1                 | -4.4           | -4.7  |        |      |
| 1966              | 47,767             | 24.3 | -2.5           | -3.6  | 7,625               | 3.9                 | -3.9           | -4.9  |        |      |
| 1967              | 45,647             | 23.0 | -4.4           | -5.3  | 6,901               | 3.5                 | -9.5           | -10.3 |        |      |
| 1968              | 42,623             | 21.2 | -6.6           | -7.8  | 6,292               | 3.1                 | -8.8           | -11.4 |        |      |
| 1969              | 39,120             | 19.3 | -8.2           | -9.0  | 5,567               | 2.8                 | -11.5          | -9.7  |        |      |
| 1970              | 37,137             | 18.1 | -5.1           | -6.2  | 5,217               | 2.6                 | -6.3           | -7.1  |        |      |
| 1971              | 35,217             | 17.0 | -5.2           | -6.1  | 4,501               | 2.2                 | -13.7          | -15.4 |        |      |
| 1972              | 32,882             | 15.7 | -6.6           | -7.6  | 4,376               | 2.1                 | -2.8           | -4.5  |        |      |
| 1973              | 30,998             | 14.6 | -5.7           | -7.0  | 3,875               | 1.8                 | -11.4          | -14.5 |        |      |
| 1974 <sup>2</sup> | 30,122             | 14.1 | -2.8           | -3.4  | 3,513               | 1.7                 | -9.3           | -5.6  |        |      |
| 1975              | 33,989             | 15.7 | --             | --    | 3,333               | 1.6                 | -5.1           | -5.9  |        |      |
| 1976              | 32,105             | 14.7 | -5.5           | -6.4  | 3,130               | 1.5                 | -6.1           | -6.3  |        |      |
| 1977              | 30,145             | 13.7 | -6.1           | -6.8  | 2,968               | 1.4                 | -5.2           | -6.7  |        |      |
| 1978              | 28,521             | 12.8 | -5.4           | -6.6  | 2,914               | 1.3                 | -1.8           | -7.1  |        |      |
| 1979 <sup>3</sup> | 27,669             | 12.3 | -3.0           | -3.9  | 2,007               | 0.9                 | -31.1          | -30.8 |        |      |
| 1980              | 27,749             | 12.2 | 0.3            | -0.7  | 1,978               | 0.9                 | -1.4           | 0.0   |        |      |
| 1981              | 27,373             | 11.9 | -1.4           | -2.3  | 1,937               | 0.8                 | -2.1           | -11.1 |        |      |
| 1982              | 25,520             | 11.0 | -6.8           | -7.7  | 1,807               | 0.8                 | -6.7           | 0.0   |        |      |
| 1983              | 23,846             | 10.2 | -6.6           | -7.4  | 1,779               | 0.8                 | -1.5           | 0.0   |        |      |
| 1984              | 22,255             | 9.4  | -6.7           | -7.5  | 1,729               | 0.7                 | -2.8           | -12.5 |        |      |
| 1985              | 22,201             | 9.3  | -0.2           | -1.1  | 1,752               | 0.7                 | 1.3            | 0.0   |        |      |
| 1986              | 22,768             | 9.5  | 2.6            | 1.6   | 1,782               | 0.7                 | 1.7            | 0.0   |        |      |
| 1987              | 22,517             | 9.3  | -1.1           | -2.0  | 1,755               | 0.7                 | -1.5           | 0.0   |        |      |
| 1988              | 22,436             | 9.2  | -0.4           | -1.3  | 1,921               | 0.8                 | 9.5            | 14.3  |        |      |
| 1989              | 23,495             | 9.5  | 4.7            | 3.7   | 1,970               | 0.8                 | 2.6            | 0.0   |        |      |
| 1990              | 25,701             | 10.3 | 9.4            | 8.2   | 1,810               | 0.7                 | -8.1           | -12.5 |        |      |
| 1991              | 26,283             | 10.4 | 2.3            | 0.9   | 1,713               | 0.7                 | -5.4           | 0.0   |        |      |
| 1992              | 26,673             | 10.4 | 1.5            | 0.1   | 1,705               | 0.7                 | -0.5           | 0.0   |        |      |
| 1993              | 25,103             | 9.7  | -5.9           | -7.1  | 1,631               | 0.6                 | -4.3           | -14.3 |        |      |
| 1994              | 24,205             | 9.2  | -3.6           | -4.8  | 1,478               | 0.6                 | -9.4           | 0.0   |        |      |
| 1995              | 22,727             | 8.5  | -6.1           | -7.2  | 1,336               | 0.5                 | -9.6           | -16.7 |        |      |
| 1996              | 21,210             | 7.9  | -6.7           | -7.8  | 1,202               | 0.5                 | -10.0          | 0.0   |        |      |
| 1997              | 19,751             | 7.2  | -6.9           | -8.0  | 1,166               | 0.4                 | -3.0           | -20.0 |        |      |
| 1998              | 18,287             | 6.6  | -7.4           | -8.5  | 1,112               | 0.4                 | -4.6           | 0.0   |        |      |
| 1999              | 17,499             | 6.3  | -4.3           | -5.4  | 930                 | 0.3                 | -16.4          | -25.0 |        |      |
| 2000              | 16,309             | 5.8  | -6.8           | -7.8  | 776                 | 0.3                 | -16.6          | 0.0   |        |      |
| 2001              | 15,945             | 5.6  | -2.2           | -3.2  | 764                 | 0.3                 | -1.6           | 0.0   |        |      |
| 2002              | 15,055             | 5.2  | -5.6           | -6.5  | 784                 | 0.3                 | 2.6            | 0.0   |        |      |
| 2003              | 14,835             | 5.1  | -1.5           | -2.3  | 711                 | 0.2                 | -10.2          | -33.3 |        |      |
| 2004              | 14,498             | 4.9  | -2.3           | -3.2  | 662                 | 0.2                 | -6.9           | 0.0   |        |      |
| 2005              | 14,061             | 4.8  | -3.0           | -3.9  | 648                 | 0.2                 | -2.1           | 0.0   |        |      |
| 2006              | 13,727             | 4.6  | -2.4           | -3.3  | 644                 | 0.2                 | -0.6           | 0.0   |        |      |
| 2007              | 13,282             | 4.4  | -3.2           | -4.2  | 554                 | 0.2                 | -14.0          | 0.0   |        |      |
| 2008              | 12,895             | 4.2  | -2.9           | -3.8  | 590                 | 0.2                 | 6.5            | 0.0   |        |      |
| 2009              | 11,520             | 3.8  | -10.7          | -11.4 | 529                 | 0.2                 | -10.3          | 0.0   |        |      |
| 2010              | 11,163             | 3.6  | -3.1           | -3.8  | 569                 | 0.2                 | 7.6            | 0.0   |        |      |
| 2011              | 10,517             | 3.4  | -5.8           | -6.5  | ...                 | ...                 | ...            | ...   |        |      |
| 2012              | 9,945              | 3.2  | -5.4           | -6.1  | ...                 | ...                 | ...            | ...   |        |      |

<sup>1</sup>Official tuberculosis mortality statistics were compiled by the National Center for Health Statistics, CDC, National Vital Statistics Reports.

<sup>2</sup>Case data after 1974 are not comparable to prior years due to changes in the surveillance case definition that became effective in 1975.

<sup>3</sup>The large decrease in death rate in 1979 occurred because late effects of tuberculosis (e.g., bronchiectasis or fibrosis) and pleurisy with effusion (without mention of cause) are no longer included in tuberculosis deaths.

Percent change in tuberculosis death rates is calculated with rounded figures. See Technical Notes.

**Note:** 1993 to 2012 tuberculosis case counts and rates updated as of June 25, 2012, using Bridged-Race 1990–1999 Intercensal Population Estimates for 1990–1999 ([ftp://ftp.cdc.gov/pub/health\\_statistics/nchs/datasets/nvss/bridgepop/documentationbridgedintercena1.doc](ftp://ftp.cdc.gov/pub/health_statistics/nchs/datasets/nvss/bridgepop/documentationbridgedintercena1.doc)) (accessed August 12, 2013) and Intercensal Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2000 to July 1, 2010 (<http://www.census.gov/popest/data/intercensal/state/state2010.html>) (accessed August 12, 2013) and Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2012 (<http://www.census.gov/popest/data/national/totals/2012/index.html>) (accessed August 12, 2013).

Percentage change results reported to one decimal. Ellipses indicate data not available. See Surveillance Slides #2 and #3.

**Table 2. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Hispanic Ethnicity and non-Hispanic Race:  
United States, 1993–2012**

| Year | Total Cases | Non-Hispanic                     |                    |                           |                                                        |           |                            | Hispanic or Latino <sup>4</sup> |           |           | Unknown or Missing <sup>5</sup> |
|------|-------------|----------------------------------|--------------------|---------------------------|--------------------------------------------------------|-----------|----------------------------|---------------------------------|-----------|-----------|---------------------------------|
|      |             | American Indian or Alaska Native | Asian <sup>1</sup> | Black or African American | Native Hawaiian or Other Pacific Islander <sup>2</sup> | White     | Multiple Race <sup>3</sup> | No.                             | (%) Rate  | No.       |                                 |
| 1993 | 25103       | 272 (1)                          | 14.0               | 3454 (14)                 | 41.2                                                   | 8947 (36) | 28.5                       | ... ...                         | 6903 (27) | 3.6       | ... ...                         |
| 1994 | 24205       | 327 (1)                          | 16.4               | 3639 (15)                 | 41.5                                                   | 8383 (35) | 26.2                       | ... ...                         | 6572 (27) | 3.4       | ... ...                         |
| 1995 | 22727       | 320 (1)                          | 15.7               | 3840 (17)                 | 41.8                                                   | 7554 (33) | 23.2                       | ... ...                         | 5972 (26) | 3.1       | ... ...                         |
| 1996 | 21210       | 287 (1)                          | 13.7               | 3666 (17)                 | 38.1                                                   | 7097 (33) | 21.5                       | ... ...                         | 5487 (26) | 2.8       | ... ...                         |
| 1997 | 19751       | 264 (1)                          | 12.3               | 3683 (19)                 | 36.6                                                   | 6604 (33) | 19.7                       | ... ...                         | 4824 (24) | 2.5       | ... ...                         |
| 1998 | 18287       | 254 (1)                          | 11.5               | 3516 (19)                 | 33.5                                                   | 5823 (32) | 17.0                       | ... ...                         | 4475 (24) | 2.3       | ... ...                         |
| 1999 | 17499       | 242 (1)                          | 10.7               | 3519 (20)                 | 32.1                                                   | 5549 (32) | 16.0                       | ... ...                         | 4227 (24) | 2.1       | ... ...                         |
| 2000 | 16309       | 232 (1)                          | 11.0               | 3392 (21)                 | 31.3                                                   | 5149 (32) | 15.0                       | ... ...                         | 3638 (22) | 1.9       | ... ...                         |
| 2001 | 15945       | 226 (1)                          | 10.6               | 3499 (22)                 | 31.2                                                   | 4782 (30) | 13.7                       | ... ...                         | 3346 (21) | 1.7       | ... ...                         |
| 2002 | 15055       | 185 (1)                          | 8.6                | 3322 (22)                 | 28.6                                                   | 4467 (30) | 12.7                       | ... ...                         | 3042 (20) | 1.5       | ... ...                         |
| 2003 | 14835       | 179 (1)                          | 8.2                | 3460 (23)                 | 29.9                                                   | 4159 (28) | 11.7                       | 64 (0)                          | 16.2      | 2792 (19) | 1.4                             |
| 2004 | 14498       | 157 (1)                          | 7.1                | 3335 (23)                 | 28.0                                                   | 4069 (28) | 11.4                       | 63 (0)                          | 15.6      | 2631 (18) | 1.3                             |
| 2005 | 14061       | 153 (1)                          | 6.8                | 3201 (23)                 | 26.0                                                   | 3955 (28) | 10.9                       | 54 (0)                          | 13.1      | 2567 (18) | 1.3                             |
| 2006 | 13727       | 164 (1)                          | 7.2                | 3297 (24)                 | 26.1                                                   | 3730 (27) | 10.2                       | 52 (0)                          | 12.3      | 2387 (17) | 1.2                             |
| 2007 | 13282       | 133 (1)                          | 5.8                | 3447 (26)                 | 26.5                                                   | 3477 (26) | 9.4                        | 95 (1)                          | 22.1      | 2207 (17) | 1.1                             |
| 2008 | 12895       | 137 (1)                          | 5.9                | 3395 (26)                 | 25.4                                                   | 3280 (25) | 8.8                        | 69 (1)                          | 15.7      | 2143 (17) | 1.1                             |
| 2009 | 11520       | 101 (1)                          | 4.3                | 3203 (28)                 | 23.4                                                   | 2872 (25) | 7.6                        | 75 (1)                          | 16.7      | 1818 (16) | 0.9                             |
| 2010 | 11163       | 152 (1)                          | 6.7                | 3077 (28)                 | 20.8                                                   | 2678 (24) | 7.0                        | 96 (1)                          | 19.2      | 1759 (16) | 0.9                             |
| 2011 | 10517       | 130 (1)                          | 5.7                | 3064 (29)                 | 20.2                                                   | 2410 (23) | 6.3                        | 81 (1)                          | 15.9      | 1654 (16) | 0.8                             |
| 2012 | 9945        | 146 (1)                          | 6.3                | 2957 (30)                 | 18.9                                                   | 2234 (22) | 5.8                        | 64 (1)                          | 12.3      | 1572 (16) | 0.8                             |

<sup>1</sup> Asian race category reporting includes Pacific Islander from 1993–2002.

<sup>2</sup> Native Hawaiian or Other Pacific Islander race first reported separately in 2003.

<sup>3</sup> Indicates two or more races reported for a person. Category first reported in 2003. Does not include persons of Hispanic or Latino origin.

<sup>4</sup> Persons of Hispanic or Latino ethnicity may be of any race or multiple race.

<sup>5</sup> The higher count for unknown or missing race results for 1993 - 2001 reflect the impact of the transitional period of incorporating new race definitions for Asian, Native Hawaiian, and Multiple Race in 2003.

**Note:** Rates for 1993–1999 have been updated using Resident Population: Monthly Postcensal Resident Population, by single year of age, sex, race, and Hispanic origin ([http://www.census.gov/popest/data/national/asrh/1990s/nat\\_monthly\\_resident.html](http://www.census.gov/popest/data/national/asrh/1990s/nat_monthly_resident.html)) (accessed August 12, 2013). Denominators for computing 2000–2011 case rates were obtained from the National Population Estimates for the 2000s: Monthly Postcensal Resident Population, by single year of age, sex, race, and Hispanic origin (<http://www.census.gov/popest/data/national/asrh/2009/2009-nat-res.html>) (accessed August 12, 2013) and National Population Estimates for the 2010s: Monthly Postcensal Resident Population, by single year of age, sex, race, and Hispanic origin (<http://www.census.gov/popest/data/national/asrh/2012/2012-nat-res.html>) (accessed August 12, 2013).

Case counts for race categories (American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and White) do not include persons of Hispanic ethnicity or multiple race.  
Data for all years updated through June 10, 2013.  
Ellipses indicate data not available.  
See Technical Notes.  
See Surveillance Slide #10.  
Zero % (0) denotes <0.5%.

**Table 3. Tuberculosis Cases and Percentages by Hispanic Ethnicity and non-Hispanic Race, and Origin of Birth:  
United States, 1993–2012**

| Year | American Indian or Alaska Native |              | Asian <sup>1</sup> |              | Non-Hispanic              |                                                        |           |                            | Hispanic or Latino <sup>4</sup> |              |           |              | Unknown or Missing <sup>5</sup> |             |            |           |
|------|----------------------------------|--------------|--------------------|--------------|---------------------------|--------------------------------------------------------|-----------|----------------------------|---------------------------------|--------------|-----------|--------------|---------------------------------|-------------|------------|-----------|
|      | US-born                          | Foreign-born | US-born            | Foreign-born | Black or African American | Native Hawaiian or Other Pacific Islander <sup>2</sup> | White     | Multiple Race <sup>3</sup> | US-born                         | Foreign-born | US-born   | Foreign-born |                                 |             |            |           |
| No.  | (%)                              | No.          | (%)                | No.          | (%)                       | No.                                                    | (%)       | No.                        | (%)                             | No.          | (%)       | No.          | (%)                             | No.         | (%)        |           |
| 1993 | 263 (97.0)                       | 8 (3.0)      | 103 (3.0)          | 3299 (97.0)  | 8250 (92.9)               | 630 (7.1)                                              | 28 (63.6) | 16 (36.4)                  | 6317 (92.3)                     | 528 (7.7)    | 1 (50.0)  | 1 (50.0)     | 2235 (44.0)                     | 2850 (56.0) | 238 (77.3) | 70 (22.7) |
| 1994 | 322 (98.5)                       | 5 (1.5)      | 133 (3.7)          | 3443 (96.3)  | 7576 (91.1)               | 738 (8.9)                                              | 40 (75.5) | 13 (24.5)                  | 6009 (92.4)                     | 494 (7.6)    | 1 (100.0) | 0 (0.0)      | 1989 (40.1)                     | 2966 (59.9) | 121 (57.1) | 91 (42.9) |
| 1995 | 314 (98.1)                       | 6 (1.9)      | 114 (3.0)          | 3665 (97.0)  | 6750 (89.4)               | 797 (10.6)                                             | 45 (77.6) | 13 (22.4)                  | 5427 (91.1)                     | 529 (8.9)    | 1 (50.0)  | 1 (50.0)     | 1907 (39.6)                     | 2911 (60.4) | 118 (60.8) | 76 (39.2) |
| 1996 | 281 (97.9)                       | 6 (2.1)      | 132 (3.7)          | 3479 (96.3)  | 6301 (88.8)               | 793 (11.2)                                             | 37 (77.1) | 11 (22.9)                  | 4968 (90.8)                     | 503 (9.2)    | 1 (100.0) | 0 (0.0)      | 1603 (35.9)                     | 2859 (64.1) | 75 (46.0)  | 88 (54.0) |
| 1997 | 259 (98.5)                       | 4 (1.5)      | 132 (3.6)          | 3494 (96.4)  | 5718 (86.7)               | 875 (13.3)                                             | 34 (66.7) | 17 (33.3)                  | 4255 (88.6)                     | 546 (11.4)   | 1 (100.0) | 0 (0.0)      | 1464 (34.9)                     | 2727 (65.1) | 72 (47.7)  | 79 (52.3) |
| 1998 | 249 (98.0)                       | 5 (2.0)      | 115 (3.3)          | 3329 (96.7)  | 4972 (85.5)               | 845 (14.5)                                             | 48 (72.7) | 18 (27.3)                  | 3914 (87.6)                     | 553 (12.4)   | 4 (100.0) | 0 (0.0)      | 1281 (31.5)                     | 2785 (68.5) | 51 (44.3)  | 64 (55.7) |
| 1999 | 237 (97.9)                       | 5 (2.1)      | 121 (3.5)          | 3336 (96.5)  | 4607 (83.3)               | 924 (16.7)                                             | 40 (80.0) | 10 (20.0)                  | 3637 (86.3)                     | 575 (13.7)   | 5 (71.4)  | 2 (28.6)     | 1119 (29.2)                     | 2717 (70.8) | 39 (54.2)  | 33 (45.8) |
| 2000 | 226 (97.4)                       | 6 (2.6)      | 115 (3.5)          | 3217 (96.5)  | 4107 (79.8)               | 1038 (20.2)                                            | 39 (78.0) | 11 (22.0)                  | 3102 (85.3)                     | 534 (14.7)   | 2 (50.0)  | 2 (50.0)     | 1015 (26.8)                     | 2770 (73.2) | 42 (50.6)  | 41 (49.4) |
| 2001 | 214 (95.1)                       | 11 (4.9)     | 102 (3.0)          | 3320 (97.0)  | 3664 (76.7)               | 1114 (23.3)                                            | 45 (78.9) | 12 (21.1)                  | 2787 (83.6)                     | 547 (16.4)   | 1 (33.3)  | 2 (66.7)     | 1025 (25.7)                     | 2965 (74.3) | 34 (46.6)  | 39 (53.4) |
| 2002 | 183 (98.9)                       | 2 (1.1)      | 109 (3.3)          | 3159 (96.7)  | 3401 (76.4)               | 1051 (23.6)                                            | 34 (77.3) | 10 (22.7)                  | 2547 (83.9)                     | 490 (16.1)   | 3 (33.3)  | 6 (66.7)     | 980 (24.8)                      | 2973 (75.2) | 25 (48.1)  | 27 (51.9) |
| 2003 | 176 (98.3)                       | 3 (1.7)      | 152 (4.4)          | 3297 (95.6)  | 3087 (74.4)               | 1064 (25.6)                                            | 50 (78.1) | 14 (21.9)                  | 2369 (85.0)                     | 418 (15.0)   | 9 (24.3)  | 28 (75.7)    | 1000 (24.5)                     | 3089 (75.5) | 18 (52.9)  | 16 (47.1) |
| 2004 | 154 (98.1)                       | 3 (1.9)      | 146 (4.4)          | 3182 (95.6)  | 2971 (73.1)               | 1096 (26.9)                                            | 55 (87.3) | 8 (12.7)                   | 2211 (84.1)                     | 418 (15.9)   | 15 (44.1) | 19 (55.9)    | 1064 (25.5)                     | 3107 (74.5) | 15 (55.6)  | 12 (44.4) |
| 2005 | 147 (96.1)                       | 6 (3.9)      | 121 (3.8)          | 3077 (96.2)  | 2875 (72.8)               | 1075 (27.2)                                            | 41 (75.9) | 13 (24.1)                  | 2131 (83.1)                     | 434 (16.9)   | 23 (51.1) | 22 (48.9)    | 955 (23.7)                      | 3073 (76.3) | 13 (35.1)  | 24 (64.9) |
| 2006 | 161 (98.2)                       | 3 (1.8)      | 133 (4.0)          | 3161 (96.0)  | 2595 (69.6)               | 1132 (30.4)                                            | 38 (73.1) | 14 (26.9)                  | 1959 (82.1)                     | 426 (17.9)   | 16 (41.0) | 23 (59.0)    | 983 (24.4)                      | 3051 (75.6) | 3 (37.5)   | 5 (62.5)  |
| 2007 | 129 (97.0)                       | 4 (3.0)      | 135 (3.9)          | 3302 (96.1)  | 2460 (71.0)               | 1003 (29.0)                                            | 72 (75.8) | 23 (24.2)                  | 1785 (81.2)                     | 412 (18.8)   | 9 (37.5)  | 15 (62.5)    | 877 (22.8)                      | 2968 (77.2) | 14 (77.8)  | 4 (22.2)  |
| 2008 | 134 (97.8)                       | 3 (2.2)      | 153 (4.5)          | 3238 (95.5)  | 2239 (68.3)               | 1041 (31.7)                                            | 52 (75.4) | 17 (24.6)                  | 1755 (81.9)                     | 387 (18.1)   | 16 (37.2) | 27 (62.8)    | 921 (24.2)                      | 2878 (75.8) | 12 (48.0)  | 13 (52.0) |
| 2009 | 97 (96.0)                        | 4 (4.0)      | 150 (4.7)          | 3049 (95.3)  | 1931 (67.3)               | 939 (32.7)                                             | 68 (90.7) | 7 (9.3)                    | 1449 (79.7)                     | 368 (20.3)   | 16 (32.7) | 33 (67.3)    | 849 (25.3)                      | 2511 (74.7) | 6 (20.7)   | 23 (79.3) |
| 2010 | 150 (98.7)                       | 2 (1.3)      | 128 (4.2)          | 2948 (95.8)  | 1774 (66.3)               | 901 (33.7)                                             | 79 (83.2) | 16 (16.8)                  | 1421 (80.8)                     | 337 (19.2)   | 21 (14.0) | 129 (86.0)   | 807 (25.0)                      | 2419 (75.0) | 1 (5.3)    | 18 (94.7) |
| 2011 | 128 (98.5)                       | 2 (1.5)      | 131 (4.3)          | 2932 (95.7)  | 1539 (63.9)               | 870 (36.1)                                             | 60 (74.1) | 21 (25.9)                  | 1328 (80.3)                     | 326 (19.7)   | 28 (18.5) | 123 (81.5)   | 766 (25.5)                      | 2239 (74.5) | 4 (22.2)   | 14 (77.8) |
| 2012 | 144 (99.3)                       | 1 (0.7)      | 118 (4.0)          | 2835 (96.0)  | 1340 (60.0)               | 894 (40.0)                                             | 51 (79.7) | 13 (20.3)                  | 1276 (81.2)                     | 295 (18.8)   | 28 (18.9) | 120 (81.1)   | 691 (24.8)                      | 2095 (75.2) | 11 (34.4)  | 21 (65.6) |

<sup>1</sup> Asian race category reporting includes Pacific Islander from 1993–2002.

<sup>2</sup> Native Hawaiian or Other Pacific Islander race first reported separately in 2003.

<sup>3</sup> Indicates two or more races reported for a person. Category first reported in 2003. Does not include persons of Hispanic or Latino origin.

<sup>4</sup> Persons of Hispanic or Latino ethnicity may be of any race or multiple race.

<sup>5</sup> The higher count for unknown or missing race results for 1993 – 2001 reflect the impact of the transitional period of incorporating new race definitions for Asian, Native Hawaiian, and Multiple Race in 2003.

**Note:** Case counts for race categories (American Indian or Alaska Native, Black or African American, Native Hawaiian or Other Pacific Islander, and White) do not include persons of Hispanic ethnicity or multiple race.

Data for all years updated through June 10, 2013.

Ellipses indicate data not available.

See Technical Notes.

See Surveillance Slide #15.

**Table 4. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Age Group: United States, 1993–2012**

| Year | Total Cases | 0–14 |     | 15–24 |      | 25–44 |     | 45–64 |      | ≥64  |      | Unknown <sup>1</sup><br>(%) |      |
|------|-------------|------|-----|-------|------|-------|-----|-------|------|------|------|-----------------------------|------|
|      |             | No.  | (%) | No.   | (%)  | No.   | (%) | No.   | (%)  | No.  | (%)  |                             |      |
| 1993 | 25103       | 1660 | (7) | 2.9   | 1821 | (7)   | 5.0 | 9589  | (38) | 11.5 | 6196 | (25)                        | 12.4 |
| 1994 | 24205       | 1659 | (7) | 2.9   | 1832 | (8)   | 5.0 | 9043  | (37) | 10.7 | 6125 | (25)                        | 11.9 |
| 1995 | 22727       | 1536 | (7) | 2.6   | 1697 | (7)   | 4.6 | 8200  | (36) | 9.7  | 5960 | (26)                        | 11.3 |
| 1996 | 21210       | 1356 | (6) | 2.3   | 1637 | (8)   | 4.4 | 7564  | (36) | 8.9  | 5572 | (26)                        | 10.2 |
| 1997 | 19751       | 1251 | (6) | 2.1   | 1674 | (8)   | 4.5 | 6884  | (35) | 8.0  | 5278 | (27)                        | 9.4  |
| 1998 | 18287       | 1077 | (6) | 1.8   | 1543 | (8)   | 4.1 | 6335  | (35) | 7.4  | 4954 | (27)                        | 8.5  |
| 1999 | 17499       | 1038 | (6) | 1.7   | 1518 | (9)   | 3.9 | 6062  | (35) | 7.1  | 4860 | (28)                        | 8.1  |
| 2000 | 16309       | 965  | (6) | 1.6   | 1618 | (10)  | 4.1 | 5576  | (34) | 6.6  | 4635 | (28)                        | 7.4  |
| 2001 | 15945       | 929  | (6) | 1.5   | 1597 | (10)  | 4.0 | 5610  | (35) | 6.6  | 4515 | (28)                        | 7.0  |
| 2002 | 15055       | 944  | (6) | 1.6   | 1498 | (10)  | 3.7 | 5288  | (35) | 6.3  | 4182 | (28)                        | 6.3  |
| 2003 | 14835       | 911  | (6) | 1.5   | 1573 | (11)  | 3.8 | 5074  | (34) | 6.1  | 4283 | (29)                        | 6.3  |
| 2004 | 14498       | 952  | (7) | 1.6   | 1603 | (11)  | 3.8 | 4939  | (34) | 5.9  | 4192 | (29)                        | 5.9  |
| 2005 | 14061       | 851  | (6) | 1.4   | 1540 | (11)  | 3.6 | 4738  | (34) | 5.7  | 4123 | (29)                        | 5.7  |
| 2006 | 13727       | 803  | (6) | 1.3   | 1532 | (11)  | 3.6 | 4689  | (34) | 5.6  | 4039 | (29)                        | 5.4  |
| 2007 | 13282       | 777  | (6) | 1.3   | 1580 | (12)  | 3.7 | 4314  | (32) | 5.2  | 4037 | (30)                        | 5.3  |
| 2008 | 12895       | 785  | (6) | 1.3   | 1444 | (11)  | 3.4 | 4241  | (33) | 5.1  | 3929 | (30)                        | 5.0  |
| 2009 | 11520       | 647  | (6) | 1.0   | 1278 | (11)  | 3.0 | 3887  | (34) | 4.7  | 3424 | (30)                        | 4.3  |
| 2010 | 11163       | 636  | (6) | 1.0   | 1199 | (11)  | 2.7 | 3669  | (33) | 4.5  | 3430 | (31)                        | 4.2  |
| 2011 | 10517       | 577  | (5) | 0.9   | 1033 | (10)  | 2.4 | 3367  | (32) | 4.1  | 3293 | (31)                        | 4.0  |
| 2012 | 9945        | 486  | (5) | 0.8   | 1020 | (10)  | 2.3 | 3118  | (31) | 3.8  | 3114 | (31)                        | 3.8  |

<sup>1</sup>Includes unknown and missing.

**Note:** Previously published rates for 1993–1999 have been updated using Bridged-Race 1990–1999 Intercensal Population Estimates for 1990–1999 ([http://ftp.cdc.gov/pub/health\\_statistics/nchs/datasets/nvs3/bridgepop/documents/bridgeintercena1.doc](http://ftp.cdc.gov/pub/health_statistics/nchs/datasets/nvs3/bridgepop/documents/bridgeintercena1.doc)) (accessed August 12, 2013). Denominators for computing 2000–2012 case rates were obtained from the Annual Estimates of the Resident Population by Sex and Five-Year Age Groups for the United States: April 1, 2000 to July 1, 2009 ([http://www.census.gov/popest/data/historical/2000s/vintage\\_2009/index.html](http://www.census.gov/popest/data/historical/2000s/vintage_2009/index.html)), and Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States, States, Counties, and Puerto Rico Commonwealth and Municipalios: April 1, 2010 to July 1, 2012 (<http://factfinder2.census.gov/bkmk/table/1.0/en/PEP/2012/PEPAGESEX>) (accessed August 12, 2013).

Data for all years updated through June 10, 2013.

See Technical Notes.

Zero % (0) denotes &lt;0.5%.

See Surveillance Slides #7 and #8.

**Table 5. Tuberculosis Cases, Percentages, and Case Rates per 100,000 Population by Origin of Birth: United States, 1993–2012**

| Year | Total Cases | U.S.-born Persons |      | Foreign-born Persons <sup>1</sup> |      | No.  | Rate | No. | Rate | Unknown or Missing (%) |
|------|-------------|-------------------|------|-----------------------------------|------|------|------|-----|------|------------------------|
|      |             | No.               | (%)  | Rate                              | No.  |      |      |     |      |                        |
| 1993 | 25103       | 17435             | (69) | 7.4                               | 7402 | (29) | 34.0 | 266 | (1)  |                        |
| 1994 | 24205       | 16191             | (67) | 6.8                               | 7750 | (32) | 36.0 | 264 | (1)  |                        |
| 1995 | 22727       | 14676             | (65) | 6.1                               | 7998 | (35) | 38.0 | 53  | (0)  |                        |
| 1996 | 21210       | 13398             | (63) | 5.6                               | 7739 | (36) | 32.0 | 73  | (0)  |                        |
| 1997 | 19751       | 11935             | (60) | 4.9                               | 7742 | (39) | 30.8 | 74  | (0)  |                        |
| 1998 | 18287       | 10634             | (58) | 4.4                               | 7599 | (42) | 28.8 | 54  | (0)  |                        |
| 1999 | 17499       | 9805              | (56) | 4.0                               | 7602 | (43) | 28.1 | 92  | (1)  |                        |
| 2000 | 16309       | 8648              | (53) | 3.5                               | 7619 | (47) | 26.4 | 42  | (0)  |                        |
| 2001 | 15945       | 7872              | (49) | 3.2                               | 8010 | (50) | 27.6 | 63  | (0)  |                        |
| 2002 | 15055       | 7282              | (48) | 2.9                               | 7718 | (51) | 25.5 | 55  | (0)  |                        |
| 2003 | 14835       | 6861              | (46) | 2.7                               | 7929 | (53) | 23.8 | 45  | (0)  |                        |
| 2004 | 14498       | 6631              | (46) | 2.6                               | 7845 | (54) | 23.1 | 22  | (0)  |                        |
| 2005 | 14061       | 6306              | (45) | 2.5                               | 7724 | (55) | 22.2 | 31  | (0)  |                        |
| 2006 | 13727       | 5888              | (43) | 2.3                               | 7815 | (57) | 21.6 | 24  | (0)  |                        |
| 2007 | 13282       | 5481              | (41) | 2.1                               | 7731 | (58) | 20.8 | 70  | (1)  |                        |
| 2008 | 12895       | 5282              | (41) | 2.0                               | 7604 | (59) | 20.1 | 9   | (0)  |                        |
| 2009 | 11520       | 4566              | (40) | 1.7                               | 6934 | (60) | 18.6 | 20  | (0)  |                        |
| 2010 | 11163       | 4381              | (39) | 1.6                               | 6770 | (61) | 17.6 | 12  | (0)  |                        |
| 2011 | 10517       | 3984              | (38) | 1.5                               | 6527 | (62) | 16.9 | 6   | (0)  |                        |
| 2012 | 9945        | 3659              | (37) | 1.4                               | 6274 | (63) | 15.9 | 12  | (0)  |                        |

<sup>1</sup>Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific Islands.

**Note:** Denominators for computing rates for years 1993–1994 were obtained from Quarterly Estimates of the United States Foreign-born and Native Resident Populations: April 1, 1990–July 1, 1999, located at <http://www.census.gov/popestimates/nation/nativity/ftab001.txt> (accessed August 12, 2013). Denominators for computing the 1995–2012 rates are based on the U.S. Census Bureau, Current Population Survey (July Supplement) via Data Ferret (<http://dataferrett.census.gov/>).

Data for all years updated through June 10, 2013.

See Technical Notes.

Zero % (0) denotes <0.5%.

See Surveillance Slides #13, #14, #17, and #18.

**Table 6. Tuberculosis Cases and Percentages Among Foreign-born Persons<sup>1</sup> by the Top 30 Countries<sup>2</sup> of Birth: United States, 2008–2012**

| Country of Origin            | Year        |              |             |              |             |              |             |              |
|------------------------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|
|                              | 2012        |              | 2011        |              | 2010        |              |             |              |
|                              | No.         | (%)          | No.         | (%)          | No.         | (%)          | No.         | (%)          |
| <b>Total Cases</b>           | <b>6274</b> | <b>(100)</b> | <b>6527</b> | <b>(100)</b> | <b>6770</b> | <b>(100)</b> | <b>6934</b> | <b>(100)</b> |
| Mexico                       | 1,308       | (21)         | 1,450       | (22)         | 1,541       | (23)         | 1,594       | (23)         |
| Philippines                  | 773         | (12)         | 757         | (12)         | 756         | (11)         | 806         | (12)         |
| India                        | 532         | (8)          | 509         | (8)          | 584         | (9)          | 541         | (8)          |
| Viet Nam                     | 456         | (7)          | 549         | (8)          | 542         | (8)          | 532         | (8)          |
| China                        | 351         | (6)          | 378         | (6)          | 370         | (5)          | 344         | (5)          |
| Guatemala                    | 193         | (3)          | 172         | (3)          | 198         | (3)          | 214         | (3)          |
| Haiti                        | 197         | (3)          | 189         | (3)          | 195         | (3)          | 207         | (3)          |
| Ethiopia                     | 162         | (3)          | 153         | (2)          | 161         | (2)          | 172         | (2)          |
| Honduras                     | 126         | (2)          | 128         | (2)          | 143         | (2)          | 151         | (2)          |
| Korea, Republic of           | 106         | (2)          | 131         | (2)          | 120         | (2)          | 156         | (2)          |
| Somalia                      | 101         | (2)          | 116         | (2)          | 125         | (2)          | 112         | (2)          |
| El Salvador                  | 116         | (2)          | 103         | (2)          | 116         | (2)          | 118         | (2)          |
| Myanmar                      | 116         | (2)          | 92          | (1)          | 116         | (2)          | 104         | (2)          |
| Peru                         | 79          | (1)          | 93          | (1)          | 111         | (2)          | 94          | (1)          |
| Ecuador                      | 65          | (1)          | 79          | (1)          | 84          | (1)          | 99          | (1)          |
| Cambodia                     | 78          | (1)          | 91          | (1)          | 70          | (1)          | 99          | (1)          |
| Pakistan                     | 68          | (1)          | 87          | (1)          | 74          | (1)          | 84          | (1)          |
| Dominican Republic           | 74          | (1)          | 75          | (1)          | 85          | (1)          | 71          | (1)          |
| Nepal                        | 82          | (1)          | 77          | (1)          | 64          | (1)          | 74          | (1)          |
| Kenya                        | 58          | (1)          | 75          | (1)          | 63          | (1)          | 73          | (1)          |
| Laos                         | 64          | (1)          | 62          | (1)          | 70          | (1)          | 60          | (1)          |
| Bangladesh                   | 54          | (1)          | 66          | (1)          | 58          | (1)          | 44          | (1)          |
| Nigeria                      | 58          | (1)          | 52          | (1)          | 43          | (1)          | 46          | (1)          |
| Thailand                     | 33          | (1)          | 37          | (1)          | 47          | (1)          | 57          | (1)          |
| Indonesia                    | 41          | (1)          | 32          | (0)          | 58          | (1)          | 34          | (0)          |
| Colombia                     | 25          | (0)          | 32          | (0)          | 43          | (1)          | 40          | (1)          |
| Cuba                         | 30          | (0)          | 40          | (1)          | 33          | (0)          | 36          | (1)          |
| Bhutan                       | 57          | (1)          | 39          | (1)          | 37          | (1)          | 33          | (0)          |
| Korea, Dem. Peoples Republic | 50          | (1)          | 38          | (1)          | 35          | (1)          | 16          | (0)          |
| Liberia                      | 33          | (1)          | 28          | (0)          | 36          | (1)          | 33          | (0)          |
| All Others                   | 788         | (13)         | 797         | (12)         | 792         | (12)         | 890         | (13)         |
|                              |             |              |             |              |             |              | 892         | (12)         |

<sup>1</sup>Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

<sup>2</sup>The top 30 countries were selected based on their ranked 5-year average number of TB cases.

<sup>3</sup>Includes Not Specified for Country of Origin.

**Note:** Zero (0) denotes <0.5%.

Data for all years updated through June 10, 2013.

**Table 7. Tuberculosis Cases and Percentages by Case Verification Criterion and Site of Disease: United States, 1993–2012**

| Year | Total Cases | Verification Criterion <sup>1</sup> |      |     |                           |     |     |                 |      |      |                    | Site of Disease <sup>5</sup> |                        |      |                              |  |
|------|-------------|-------------------------------------|------|-----|---------------------------|-----|-----|-----------------|------|------|--------------------|------------------------------|------------------------|------|------------------------------|--|
|      |             | Positive Culture                    |      |     | Positive NAA <sup>2</sup> |     |     | Case Definition |      |      | Provider Diagnosis |                              | Pulmonary <sup>3</sup> |      | Extra-pulmonary <sup>4</sup> |  |
|      |             | No.                                 | (%)  | No. | (%)                       | No. | (%) | No.             | (%)  | No.  | (%)                | No.                          | (%)                    | No.  | (%)                          |  |
| 1993 | 25103       | 20307                               | (81) | 0   | (0)                       | 185 | (1) | 3088            | (12) | 1523 | (6)                | 21154                        | (84)                   | 3940 | (16)                         |  |
| 1994 | 24205       | 19506                               | (81) | 0   | (0)                       | 189 | (1) | 2916            | (12) | 1594 | (7)                | 20318                        | (84)                   | 3885 | (16)                         |  |
| 1995 | 22727       | 18266                               | (80) | 0   | (0)                       | 189 | (1) | 2748            | (12) | 1524 | (7)                | 1887                         | (83)                   | 3835 | (17)                         |  |
| 1996 | 21210       | 17154                               | (81) | 0   | (0)                       | 131 | (1) | 2607            | (12) | 1318 | (6)                | 17387                        | (82)                   | 3814 | (18)                         |  |
| 1997 | 19751       | 15979                               | (81) | 0   | (0)                       | 155 | (1) | 2411            | (12) | 1206 | (6)                | 16239                        | (82)                   | 3509 | (18)                         |  |
| 1998 | 18287       | 14790                               | (81) | 0   | (0)                       | 155 | (1) | 2253            | (12) | 1089 | (6)                | 14801                        | (81)                   | 3484 | (19)                         |  |
| 1999 | 17499       | 13994                               | (80) | 0   | (0)                       | 172 | (1) | 2103            | (12) | 1230 | (7)                | 14065                        | (80)                   | 3431 | (20)                         |  |
| 2000 | 16309       | 13013                               | (80) | 0   | (0)                       | 148 | (1) | 1951            | (12) | 1197 | (7)                | 13086                        | (80)                   | 3211 | (20)                         |  |
| 2001 | 15945       | 12750                               | (80) | 0   | (0)                       | 123 | (1) | 1886            | (12) | 1186 | (7)                | 12724                        | (80)                   | 3217 | (20)                         |  |
| 2002 | 15055       | 11974                               | (80) | 0   | (0)                       | 104 | (1) | 1822            | (12) | 1155 | (8)                | 11901                        | (79)                   | 3148 | (21)                         |  |
| 2003 | 14835       | 11683                               | (79) | 0   | (0)                       | 116 | (1) | 1783            | (12) | 1253 | (8)                | 11805                        | (80)                   | 3020 | (20)                         |  |
| 2004 | 14498       | 11326                               | (78) | 0   | (0)                       | 80  | (1) | 1824            | (13) | 1268 | (9)                | 11523                        | (80)                   | 2971 | (20)                         |  |
| 2005 | 14061       | 10955                               | (78) | 0   | (0)                       | 96  | (1) | 1797            | (13) | 1213 | (9)                | 11122                        | (79)                   | 2933 | (21)                         |  |
| 2006 | 13727       | 10744                               | (78) | 0   | (0)                       | 93  | (1) | 1629            | (12) | 1261 | (9)                | 10852                        | (79)                   | 2872 | (21)                         |  |
| 2007 | 13282       | 10426                               | (78) | 0   | (0)                       | 69  | (1) | 1496            | (11) | 1291 | (10)               | 10592                        | (80)                   | 2687 | (20)                         |  |
| 2008 | 12895       | 10024                               | (78) | 18  | (0)                       | 60  | (0) | 1548            | (12) | 1245 | (10)               | 10238                        | (79)                   | 2653 | (21)                         |  |
| 2009 | 11520       | 8886                                | (77) | 56  | (0)                       | 74  | (1) | 1776            | (15) | 728  | (6)                | 9010                         | (78)                   | 2494 | (22)                         |  |
| 2010 | 11163       | 8454                                | (76) | 109 | (1)                       | 71  | (1) | 1875            | (17) | 654  | (6)                | 8728                         | (78)                   | 2426 | (22)                         |  |
| 2011 | 10517       | 8084                                | (77) | 129 | (1)                       | 57  | (1) | 1680            | (16) | 567  | (5)                | 8330                         | (79)                   | 2182 | (21)                         |  |
| 2012 | 9945        | 7597                                | (76) | 151 | (2)                       | 43  | (0) | 1611            | (16) | 543  | (5)                | 7824                         | (79)                   | 2100 | (21)                         |  |

<sup>1</sup> Based on the public health surveillance case definition for tuberculosis; see Appendix A.

<sup>2</sup> Nucleic Acid Amplification test

<sup>3</sup> Includes all cases among persons with pulmonary as the only site of disease, and persons with both pulmonary and extrapulmonary sites of disease.

<sup>4</sup> Includes cases among persons with extrapulmonary TB disease only.

<sup>5</sup> Excludes missing and unknowns.

**Note:** See Technical Notes.

Data for all years updated through June 10, 2013.

**Table 8. Tuberculosis Cases and Percentages, by Resistance to INH<sup>1</sup>, Origin of Birth, and Previous History of TB:  
United States, 1993–2012**

| Year     | All INH-resistant <sup>2</sup> | Isoniazid Resistant TB Cases |          |                |       |          |                                      |     |                |        |       | Foreign-born <sup>3,4</sup> INH-resistant |       |                |          |        |      |     |        |
|----------|--------------------------------|------------------------------|----------|----------------|-------|----------|--------------------------------------|-----|----------------|--------|-------|-------------------------------------------|-------|----------------|----------|--------|------|-----|--------|
|          |                                | Total INH-resistant          |          |                |       |          | U.S.-born INH-resistant <sup>3</sup> |     |                |        |       | Previous TB                               |       |                |          |        |      |     |        |
|          |                                | Previous TB                  |          | No Previous TB |       |          | Previous TB                          |     | No Previous TB |        |       | Previous TB                               |       | No Previous TB |          |        |      |     |        |
| Eligible | No.                            | (%)                          | Eligible | No.            | (%)   | Eligible | No.                                  | (%) | Eligible       | No.    | (%)   | Eligible                                  | No.   | (%)            | Eligible | No.    | (%)  |     |        |
| 1993     | 1534                           | 982                          | 161      | (16.4)         | 16601 | 1367     | (8.2)                                | 668 | 83             | (12.4) | 11809 | 789                                       | (6.7) | 301            | 75       | (24.9) | 4664 | 564 | (12.1) |
| 1994     | 1543                           | 1033                         | 175      | (16.9)         | 16416 | 1352     | (8.2)                                | 693 | 81             | (11.7) | 11019 | 709                                       | (6.4) | 336            | 93       | (27.7) | 5280 | 631 | (12.0) |
| 1995     | 1350                           | 958                          | 168      | (17.5)         | 16022 | 1172     | (7.3)                                | 593 | 77             | (13.0) | 10351 | 555                                       | (5.4) | 363            | 91       | (25.1) | 5640 | 616 | (10.9) |
| 1996     | 1284                           | 862                          | 142      | (16.5)         | 15358 | 1133     | (7.4)                                | 559 | 68             | (12.2) | 9646  | 496                                       | (5.1) | 303            | 74       | (24.4) | 5665 | 636 | (11.2) |
| 1997     | 1195                           | 742                          | 109      | (14.7)         | 14448 | 1078     | (7.5)                                | 455 | 35             | (7.7)  | 8705  | 435                                       | (5.0) | 286            | 74       | (25.9) | 5698 | 640 | (11.2) |
| 1998     | 1120                           | 749                          | 98       | (13.1)         | 13419 | 1011     | (7.5)                                | 485 | 38             | (7.8)  | 7712  | 366                                       | (4.7) | 262            | 60       | (22.9) | 5674 | 643 | (11.3) |
| 1999     | 999                            | 669                          | 82       | (12.3)         | 12655 | 899      | (7.1)                                | 383 | 25             | (6.5)  | 7020  | 283                                       | (4.0) | 283            | 55       | (19.4) | 5583 | 614 | (11.0) |
| 2000     | 981                            | 632                          | 84       | (13.3)         | 11825 | 889      | (7.5)                                | 360 | 22             | (6.1)  | 6144  | 269                                       | (4.4) | 272            | 62       | (22.8) | 5652 | 617 | (10.9) |
| 2001     | 897                            | 629                          | 87       | (13.8)         | 11510 | 800      | (7.0)                                | 324 | 28             | (8.6)  | 5583  | 242                                       | (4.3) | 302            | 59       | (19.5) | 5891 | 557 | (9.5)  |
| 2002     | 912                            | 569                          | 80       | (14.1)         | 10813 | 826      | (7.6)                                | 303 | 23             | (7.6)  | 5069  | 206                                       | (4.1) | 264            | 57       | (21.6) | 5703 | 619 | (10.9) |
| 2003     | 903                            | 524                          | 65       | (12.4)         | 10751 | 822      | (7.6)                                | 253 | 16             | (6.3)  | 4864  | 214                                       | (4.4) | 271            | 49       | (18.1) | 5858 | 605 | (10.3) |
| 2004     | 872                            | 537                          | 64       | (11.9)         | 10480 | 801      | (7.6)                                | 274 | 15             | (5.5)  | 4697  | 214                                       | (4.6) | 263            | 49       | (18.6) | 5773 | 587 | (10.2) |
| 2005     | 842                            | 506                          | 70       | (13.8)         | 10064 | 761      | (7.6)                                | 239 | 18             | (7.5)  | 4412  | 188                                       | (4.3) | 267            | 52       | (19.5) | 5635 | 567 | (10.1) |
| 2006     | 845                            | 493                          | 67       | (13.6)         | 9905  | 770      | (7.8)                                | 203 | 9              | (4.4)  | 4144  | 173                                       | (4.2) | 289            | 57       | (19.7) | 5745 | 596 | (10.4) |
| 2007     | 798                            | 496                          | 71       | (14.3)         | 9647  | 715      | (7.4)                                | 206 | 14             | (6.8)  | 3878  | 164                                       | (4.2) | 288            | 57       | (19.8) | 5716 | 547 | (9.6)  |
| 2008     | 835                            | 429                          | 57       | (13.3)         | 9308  | 774      | (8.3)                                | 170 | 13             | (7.6)  | 3677  | 189                                       | (5.1) | 259            | 44       | (17.0) | 5625 | 584 | (10.4) |
| 2009     | 761                            | 341                          | 52       | (15.2)         | 7735  | 650      | (8.4)                                | 116 | 6              | (5.2)  | 3052  | 187                                       | (6.1) | 224            | 46       | (20.5) | 4674 | 463 | (9.9)  |
| 2010     | 699                            | 358                          | 62       | (17.3)         | 7805  | 629      | (8.1)                                | 127 | 12             | (9.4)  | 2973  | 168                                       | (5.7) | 231            | 50       | (21.6) | 4824 | 460 | (9.5)  |
| 2011     | 752                            | 346                          | 59       | (17.1)         | 7505  | 685      | (9.1)                                | 137 | 9              | (6.6)  | 2702  | 174                                       | (6.4) | 209            | 50       | (23.9) | 4800 | 511 | (10.6) |
| 2012     | 660                            | 342                          | 49       | (14.3)         | 6846  | 610      | (8.9)                                | 124 | 8              | (6.5)  | 2429  | 138                                       | (5.7) | 218            | 41       | (18.8) | 4411 | 471 | (10.7) |

<sup>1</sup>Resistance to at least isoniazid. Isolates may be resistant to other drugs. Cases are culture positive with initial drug susceptibility testing done. Excludes cases with susceptibility testing not done or unknown for isoniazid.

<sup>2</sup>This column provides an overall total of all INH-resistant cases, including those where previous history of TB is unknown and origin or birth is unknown.

<sup>3</sup>Excludes cases where previous history of TB is unknown and cases where origin of birth is unknown.

<sup>4</sup>Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Commonwealth of the Northern Mariana Islands, Midway Island, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

Note: Data for all years updated through June 10, 2013.

**Table 9. Tuberculosis Cases and Percentages, by Multidrug Resistance<sup>1</sup>, Origin of Birth, and Previous History of TB:  
United States, 1993–2012**

| Year | All MDR <sup>2</sup> | Total MDR <sup>3</sup> |     |                |          | No Previous TB |       |                |     | U.S.-born MDR <sup>3</sup> |          |                |       | Multidrug Resistant TB Cases    |     |        |  |
|------|----------------------|------------------------|-----|----------------|----------|----------------|-------|----------------|-----|----------------------------|----------|----------------|-------|---------------------------------|-----|--------|--|
|      |                      | Previous TB            |     | No Previous TB |          | Previous TB    |       | No Previous TB |     | Previous TB                |          | No Previous TB |       | Foreign-born <sup>3,4</sup> MDR |     |        |  |
|      |                      | Eligible               | No. | (%)            | Eligible | No.            | (%)   | Eligible       | No. | (%)                        | Eligible | No.            | (%)   | Eligible                        | No. | (%)    |  |
| 1993 | 484                  | 982                    | 76  | (7.7)          | 16601    | 407            | (2.5) | 668            | 30  | (4.5)                      | 11809    | 301            | (2.5) | 301                             | 46  | (15.3) |  |
| 1994 | 431                  | 1033                   | 74  | (7.2)          | 16416    | 353            | (2.2) | 693            | 35  | (5.1)                      | 11019    | 238            | (2.2) | 336                             | 38  | (11.3) |  |
| 1995 | 327                  | 958                    | 70  | (7.3)          | 16022    | 254            | (1.6) | 593            | 28  | (4.7)                      | 10351    | 169            | (1.6) | 363                             | 42  | (11.6) |  |
| 1996 | 250                  | 862                    | 43  | (5.0)          | 15358    | 207            | (1.3) | 559            | 21  | (3.8)                      | 9646     | 105            | (1.1) | 303                             | 22  | (7.3)  |  |
| 1997 | 201                  | 742                    | 44  | (5.9)          | 14448    | 155            | (1.1) | 455            | 12  | (2.6)                      | 8705     | 76             | (0.9) | 286                             | 32  | (11.2) |  |
| 1998 | 155                  | 749                    | 23  | (3.1)          | 13419    | 132            | (1.0) | 485            | 6   | (1.2)                      | 7712     | 55             | (0.7) | 262                             | 17  | (6.5)  |  |
| 1999 | 157                  | 669                    | 28  | (4.2)          | 12655    | 127            | (1.0) | 383            | 6   | (1.6)                      | 7020     | 39             | (0.6) | 283                             | 22  | (7.8)  |  |
| 2000 | 146                  | 632                    | 26  | (4.1)          | 11825    | 120            | (1.0) | 360            | 2   | (0.6)                      | 6144     | 40             | (0.7) | 272                             | 24  | (8.8)  |  |
| 2001 | 151                  | 629                    | 33  | (5.2)          | 11510    | 115            | (1.0) | 324            | 7   | (2.2)                      | 5583     | 34             | (0.6) | 302                             | 26  | (8.6)  |  |
| 2002 | 158                  | 569                    | 26  | (4.6)          | 10813    | 132            | (1.2) | 303            | 3   | (1.0)                      | 5069     | 35             | (0.7) | 264                             | 23  | (8.7)  |  |
| 2003 | 119                  | 524                    | 21  | (4.0)          | 10751    | 94             | (0.9) | 253            | 2   | (0.8)                      | 4864     | 24             | (0.5) | 271                             | 19  | (7.0)  |  |
| 2004 | 128                  | 537                    | 27  | (5.0)          | 10480    | 100            | (1.0) | 274            | 4   | (1.5)                      | 4697     | 26             | (0.6) | 263                             | 23  | (8.7)  |  |
| 2005 | 125                  | 506                    | 23  | (4.5)          | 10064    | 98             | (1.0) | 239            | 2   | (0.8)                      | 4412     | 20             | (0.5) | 267                             | 21  | (7.9)  |  |
| 2006 | 124                  | 493                    | 20  | (4.1)          | 9905     | 103            | (1.0) | 203            | 1   | (0.5)                      | 4144     | 19             | (0.5) | 289                             | 19  | (6.6)  |  |
| 2007 | 124                  | 496                    | 19  | (3.8)          | 9647     | 101            | (1.0) | 206            | 3   | (1.5)                      | 3878     | 19             | (0.5) | 288                             | 16  | (5.6)  |  |
| 2008 | 107                  | 429                    | 19  | (4.4)          | 9308     | 88             | (0.9) | 170            | 3   | (1.8)                      | 3677     | 21             | (0.6) | 259                             | 16  | (6.2)  |  |
| 2009 | 112                  | 341                    | 19  | (5.6)          | 7735     | 87             | (1.1) | 116            | 1   | (0.9)                      | 3052     | 11             | (0.4) | 224                             | 18  | (8.0)  |  |
| 2010 | 104                  | 358                    | 16  | (4.5)          | 7805     | 87             | (1.1) | 127            | 2   | (1.6)                      | 2973     | 14             | (0.5) | 231                             | 14  | (6.1)  |  |
| 2011 | 127                  | 346                    | 27  | (7.8)          | 7505     | 99             | (1.3) | 137            | 1   | (0.7)                      | 2702     | 16             | (0.6) | 209                             | 26  | (12.4) |  |
| 2012 | 83                   | 342                    | 10  | (2.9)          | 6846     | 72             | (1.1) | 124            | 0   | (0.0)                      | 2429     | 10             | (0.4) | 218                             | 10  | (4.6)  |  |

<sup>1</sup>Resistance to at least isoniazid and rifampin. Isolates may be resistant to other drugs. Cases are culture positive with initial drug susceptibility testing done. Excludes cases with susceptibility testing not done or unknown for isoniazid and rifampin.

<sup>2</sup>This column provides an overall total of all MDR cases, including those where previous history of TB is unknown and origin or birth is unknown.

<sup>3</sup>Excludes cases where previous history of TB is unknown and cases where origin of birth is unknown.

<sup>4</sup>Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific Islands.

Note: Data for all years updated through June 10, 2013.

**Table 10. Percentages of Tuberculosis Cases by Initial Drug Regimen, Use of Directly Observed Therapy (DOT), and Completion of Therapy (COT): United States, 1993–2012**

| Year              | Initial Drug Regimen <sup>1,2</sup> |        |        | Directly Observed Therapy <sup>3</sup> |                                | Therapy ≤1 Year Indicated <sup>4</sup> |        |
|-------------------|-------------------------------------|--------|--------|----------------------------------------|--------------------------------|----------------------------------------|--------|
|                   |                                     |        |        | DOT Only                               | Both DOT and Self-Administered |                                        |        |
|                   | IR                                  | IRZ    | IRZE   |                                        |                                | COT ≤1 Year                            | COT    |
| 1993              | (12.9)                              | (31.2) | (40.3) | (21.7)                                 | (14.4)                         | (64.0)                                 | (87.5) |
| 1994              | (7.0)                               | (23.3) | (55.7) | (28.1)                                 | (20.5)                         | (69.0)                                 | (87.9) |
| 1995              | (5.2)                               | (20.3) | (62.7) | (37.3)                                 | (21.5)                         | (74.0)                                 | (89.8) |
| 1996              | (4.2)                               | (17.5) | (67.3) | (42.5)                                 | (22.4)                         | (76.5)                                 | (90.6) |
| 1997              | (3.2)                               | (15.1) | (71.9) | (47.0)                                 | (23.8)                         | (78.3)                                 | (91.4) |
| 1998              | (2.6)                               | (12.9) | (74.3) | (47.7)                                 | (26.6)                         | (80.6)                                 | (92.5) |
| 1999              | (2.2)                               | (11.2) | (76.9) | (49.4)                                 | (27.6)                         | (80.8)                                 | (92.4) |
| 2000              | (2.0)                               | (10.4) | (78.5) | (52.5)                                 | (25.8)                         | (81.6)                                 | (92.7) |
| 2001              | (1.7)                               | (9.6)  | (79.8) | (53.6)                                 | (27.5)                         | (81.8)                                 | (92.8) |
| 2002              | (1.8)                               | (8.9)  | (80.3) | (55.4)                                 | (27.8)                         | (82.3)                                 | (92.7) |
| 2003              | (1.4)                               | (8.1)  | (81.3) | (56.5)                                 | (28.5)                         | (83.0)                                 | (92.9) |
| 2004              | (1.5)                               | (6.4)  | (82.4) | (58.9)                                 | (27.7)                         | (83.6)                                 | (92.6) |
| 2005              | (1.3)                               | (5.5)  | (83.7) | (57.9)                                 | (29.6)                         | (83.2)                                 | (92.6) |
| 2006              | (1.2)                               | (4.8)  | (83.3) | (57.5)                                 | (30.4)                         | (84.1)                                 | (93.3) |
| 2007              | (1.1)                               | (4.6)  | (83.6) | (56.3)                                 | (32.9)                         | (84.8)                                 | (94.0) |
| 2008              | (1.0)                               | (3.5)  | (84.3) | (56.4)                                 | (33.5)                         | (85.2)                                 | (93.4) |
| 2009              | (1.0)                               | (3.2)  | (84.2) | (59.6)                                 | (30.3)                         | (87.8)                                 | (95.5) |
| 2010              | (0.9)                               | (3.0)  | (84.5) | (59.1)                                 | (31.1)                         | (88.1)                                 | (95.6) |
| 2011 <sup>5</sup> | (0.7)                               | (2.7)  | (85.2) | (62.7)                                 | (28.5)                         | (82.1)                                 | (88.0) |
| 2012              | (0.7)                               | (2.2)  | (84.5) | (64.0)                                 | (25.8)                         | (47.1)                                 | (48.3) |

<sup>1</sup> Includes persons alive at diagnosis.

<sup>2</sup> I=isoniazid; R=rifampin; Z=pyrazinamide; E=ethambutol. Excludes cases with no information on initial drug regimen; In 2012, 0.83% received no initial drug therapy, 0.25% were started on one drug, and 11.50% had an initial multidrug regimen other than IR, IRZ, or IRZE.

<sup>3</sup> Includes persons alive at diagnosis with initial drug regimen of one or more drugs prescribed.

<sup>4</sup> Includes persons alive at diagnosis, with initial drug regimen of one or more drugs prescribed, who did not die during therapy. Excludes persons with initial isolate rifampin resistant, or patient with meningeal disease, or pediatric patient (aged <15) with miliary disease or positive blood culture.

<sup>5</sup> Beginning in 2011, those who moved out of country during treatment are excluded from the denominator of those eligible for COT.

**Note:** Data for all years updated through June 10, 2013.

See Technical Notes for description of COT calculation.

See Surveillance Slides #30 and #31.

**Table 11. Tuberculosis Cases and Percentages in Persons with HIV Test Results<sup>1</sup> and with HIV Coinfection by Age Group:  
United States, 1993–2012**

| Year              | Total No. | 25–44 Years Old  |      |              | All Ages         |           |              |
|-------------------|-----------|------------------|------|--------------|------------------|-----------|--------------|
|                   |           | HIV Test Results |      | HIV Positive | HIV Test Results |           | HIV Positive |
|                   |           | No.              | (%)  | No.          | (%)              | Total No. | No.          |
| 1993              | 9589      | 4382             | (46) | 2790         | (64)             | 25103     | 7457         |
| 1994              | 9043      | 4442             | (49) | 2669         | (60)             | 24205     | 7887         |
| 1995              | 8200      | 4276             | (52) | 2171         | (51)             | 22727     | 8178         |
| 1996              | 7564      | 4366             | (58) | 1856         | (43)             | 21210     | 8832         |
| 1997              | 6884      | 4141             | (60) | 1471         | (36)             | 19751     | 8771         |
| 1998              | 6335      | 3862             | (61) | 1240         | (32)             | 18287     | 8292         |
| 1999              | 6062      | 3810             | (63) | 1174         | (31)             | 17499     | 8419         |
| 2000              | 5576      | 3525             | (63) | 955          | (27)             | 16309     | 8117         |
| 2001              | 5610      | 3576             | (64) | 911          | (25)             | 15945     | 8095         |
| 2002              | 5288      | 3512             | (66) | 845          | (24)             | 15055     | 8022         |
| 2003              | 5074      | 3424             | (67) | 807          | (24)             | 14835     | 8117         |
| 2004              | 4939      | 3442             | (70) | 683          | (20)             | 14498     | 8509         |
| 2005              | 4738      | 3276             | (69) | 611          | (19)             | 14061     | 8227         |
| 2006              | 4689      | 3285             | (70) | 558          | (17)             | 13727     | 8302         |
| 2007              | 4314      | 3161             | (73) | 489          | (15)             | 13282     | 8357         |
| 2008              | 4241      | 3109             | (73) | 411          | (13)             | 12895     | 8244         |
| 2009              | 3887      | 2857             | (74) | 402          | (14)             | 11520     | 7395         |
| 2010              | 3669      | 2777             | (76) | 322          | (12)             | 11163     | 7514         |
| 2011 <sup>2</sup> | 3367      | 3060             | (91) | 340          | (11)             | 10517     | 8752         |
| 2012              | 3118      | 2862             | (92) | 333          | (12)             | 9945      | 8377         |

<sup>1</sup>Includes persons with positive, negative, or indeterminate HIV test results and persons from California with co-diagnosis of TB and AIDS. Rhode Island did not report HIV test results for years 1993–1997. HIV test results for Vermont are not included for years 2007–2010. HIV test results for California are not included for years 2005–2010.

<sup>2</sup>California began reporting HIV test results to CDC in 2011

**Note:** Data for all years updated through June 10, 2013.  
See Surveillance Slides #26 and #27.

**Table 12. Tuberculosis Cases and Percentages by Reason Tuberculosis Therapy Stopped:  
United States, 1993–2010**

| Year | Total Cases <sup>1</sup> | Completed Therapy |        | Adverse Event | Moved <sup>2</sup> | Lost |       | Refused | Died <sup>3</sup> |     | Unknown <sup>4</sup> |
|------|--------------------------|-------------------|--------|---------------|--------------------|------|-------|---------|-------------------|-----|----------------------|
|      | No.                      | No.               | (%)    | No.           | (%)                | No.  | (%)   | No.     | (%)               | No. | (%)                  |
| 1993 | 23741                    | 18044             | (76.0) | 0             | (0.0)              | 1120 | (4.7) | 1086    | (4.6)             | 223 | (0.9)                |
| 1994 | 23051                    | 17763             | (77.1) | 0             | (0.0)              | 1194 | (5.2) | 740     | (3.2)             | 183 | (0.8)                |
| 1995 | 21706                    | 17306             | (79.7) | 0             | (0.0)              | 969  | (4.5) | 570     | (2.6)             | 156 | (0.7)                |
| 1996 | 20298                    | 16528             | (81.4) | 0             | (0.0)              | 783  | (3.9) | 525     | (2.6)             | 156 | (0.8)                |
| 1997 | 18930                    | 15673             | (82.8) | 0             | (0.0)              | 667  | (3.5) | 444     | (2.3)             | 119 | (0.6)                |
| 1998 | 17584                    | 14766             | (84.0) | 0             | (0.0)              | 534  | (3.0) | 411     | (2.3)             | 104 | (0.6)                |
| 1999 | 16861                    | 14234             | (84.4) | 0             | (0.0)              | 456  | (2.7) | 359     | (2.1)             | 104 | (0.6)                |
| 2000 | 15785                    | 13408             | (84.9) | 0             | (0.0)              | 408  | (2.6) | 397     | (2.5)             | 112 | (0.7)                |
| 2001 | 15409                    | 13242             | (85.9) | 0             | (0.0)              | 378  | (2.5) | 402     | (2.6)             | 99  | (0.6)                |
| 2002 | 14564                    | 12482             | (85.7) | 0             | (0.0)              | 336  | (2.3) | 412     | (2.8)             | 87  | (0.6)                |
| 2003 | 14379                    | 12418             | (86.4) | 0             | (0.0)              | 313  | (2.2) | 389     | (2.7)             | 84  | (0.6)                |
| 2004 | 14080                    | 12118             | (86.1) | 0             | (0.0)              | 337  | (2.4) | 370     | (2.6)             | 82  | (0.6)                |
| 2005 | 13674                    | 11728             | (85.8) | 1             | (0.0)              | 323  | (2.4) | 338     | (2.5)             | 90  | (0.7)                |
| 2006 | 13316                    | 11540             | (86.7) | 0             | (0.0)              | 292  | (2.2) | 358     | (2.7)             | 79  | (0.6)                |
| 2007 | 12907                    | 11348             | (87.9) | 0             | (0.0)              | 241  | (1.9) | 327     | (2.5)             | 73  | (0.6)                |
| 2008 | 12552                    | 10885             | (86.7) | 6             | (0.0)              | 257  | (2.0) | 329     | (2.6)             | 78  | (0.6)                |
| 2009 | 11181                    | 9820              | (87.8) | 21            | (0.2)              | 96   | (0.9) | 191     | (1.7)             | 86  | (0.8)                |
| 2010 | 10824                    | 9488              | (87.7) | 29            | (0.3)              | ...  | (0.0) | 172     | (1.6)             | 66  | (0.6)                |
|      |                          |                   |        |               |                    |      |       |         |                   | 641 | (5.9)                |
|      |                          |                   |        |               |                    |      |       |         |                   | 428 | (4.0)                |

<sup>1</sup> Includes all cases in persons reported as alive at diagnosis and taking one or more TB drugs.

<sup>2</sup> In 2009 the moved variable was removed from the RVCT; see Technical Notes for details.

<sup>3</sup> Died = died of any cause (not only TB).

<sup>4</sup> Includes cases in persons reporting reason therapy stopped = Other, Missing, or Unknown.

**Note:** Data for all years are updated through June 10, 2013.

Data complete through 2010 only. See Technical Notes for details.

**Table 13. National Tuberculosis Genotyping Surveillance Coverage<sup>1</sup>: United States, 2004–2012**

| Year | Reported TB Cases | Reported Culture Positive Cases | Cases with Genotype Result | Genotype Surveillance Coverage |
|------|-------------------|---------------------------------|----------------------------|--------------------------------|
|      | No.               | No.                             | No.                        | (%)                            |
| 2004 | 14,498            | 11,326                          | 5,954                      | (52.6)                         |
| 2005 | 14,061            | 10,955                          | 7,500                      | (68.5)                         |
| 2006 | 13,727            | 10,744                          | 7,525                      | (70.0)                         |
| 2007 | 13,282            | 10,426                          | 8,431                      | (80.9)                         |
| 2008 | 12,895            | 10,024                          | 8,179                      | (81.6)                         |
| 2009 | 11,520            | 8,886                           | 7,710                      | (86.8)                         |
| 2010 | 11,163            | 8,454                           | 7,723                      | (91.3)                         |
| 2011 | 10,517            | 8,084                           | 7,557                      | (93.5)                         |
| 2012 | 9,945             | 7,597                           | 7,102                      | (93.5)                         |

<sup>1</sup> Genotype surveillance coverage is defined as the percentage of all culture positive tuberculosis (TB) cases for which there was a genotyped isolate.

**NOTE:** This table reflects genotyping surveillance coverage for the 50 states and the District of Columbia; for genotyping surveillance coverage of the United States Affiliated Pacific Islands, please see Table 14.

See Surveillance Slide #33.

**Table 14. National Tuberculosis Genotyping Surveillance Coverage<sup>1</sup>: United States Affiliated Pacific Islands<sup>2</sup>, 2004–2012**

| Year | Reported TB Cases | Reported Culture Positive Cases | Cases with Genotype Result | Genotype Surveillance Coverage |
|------|-------------------|---------------------------------|----------------------------|--------------------------------|
|      | No.               | No.                             | No.                        | (%)                            |
| 2004 | 288               | 213                             | 19                         | (8.9)                          |
| 2005 | 388               | 237                             | 95                         | (40.1)                         |
| 2006 | 344               | 211                             | 84                         | (39.8)                         |
| 2007 | 527               | 181                             | 60                         | (33.2)                         |
| 2008 | 549               | 237                             | 39                         | (16.5)                         |
| 2009 | 534               | 237                             | 207                        | (87.3)                         |
| 2010 | 617               | 308                             | 265                        | (86.0)                         |
| 2011 | 455               | 220                             | 163                        | (74.1)                         |
| 2012 | 487               | 247                             | 195                        | (78.9)                         |

<sup>1</sup> Genotype surveillance coverage is defined as the percentage of all culture positive tuberculosis (TB) cases for which there was a genotyped isolate

<sup>2</sup> The U.S. Affiliated Pacific Islands include American Samoa, Northern Mariana Islands, Federated States of Micronesia, Guam, Marshall Islands, and Palau.

**Table 15. Genotyped Tuberculosis Cases with *Mycobacterium bovis*<sup>1</sup> by Origin of Birth: United States, 2004–2012**

| Year | Total Genotyped Cases | <i>Mycobacterium bovis</i> cases |       |           |        |              |        |
|------|-----------------------|----------------------------------|-------|-----------|--------|--------------|--------|
|      |                       | Total                            |       | U.S.-born |        | Foreign-born |        |
|      | No.                   | No. <sup>2</sup>                 | (%)   | No.       | (%)    | No.          | (%)    |
| 2004 | 5,954                 | 87                               | (1.5) | 28        | (32.2) | 59           | (67.8) |
| 2005 | 7,500                 | 100                              | (1.3) | 33        | (33.0) | 67           | (67.0) |
| 2006 | 7,525                 | 129                              | (1.7) | 33        | (25.6) | 95           | (73.6) |
| 2007 | 8,431                 | 129                              | (1.5) | 27        | (20.9) | 101          | (78.3) |
| 2008 | 8,179                 | 147                              | (1.8) | 39        | (26.5) | 108          | (73.5) |
| 2009 | 7,710                 | 131                              | (1.7) | 40        | (30.5) | 91           | (69.5) |
| 2010 | 7,722                 | 121                              | (1.6) | 30        | (24.8) | 91           | (75.2) |
| 2011 | 7,557                 | 135                              | (1.8) | 44        | (32.6) | 91           | (67.4) |
| 2012 | 7,102                 | 121                              | (1.7) | 31        | (25.6) | 90           | (74.4) |

<sup>1</sup> Defined by Spoligotype motifs ending in “600”.

<sup>2</sup> This column reports all genotyped *M. bovis* cases, including those where origin of birth is unknown.

**This page intentionally left blank**

# **Morbidity Tables**

## **2012**



**Table 16. Tuberculosis Cases and Percentages Among Foreign-born Persons<sup>1</sup> by the Top 30 Countries of Birth and Years in the United States Before TB Diagnosis: United States, 2012**

| Country of Origin <sup>2</sup> | No. Years in U.S. <sup>3</sup> |            |             |             |             |             |             |            |            |
|--------------------------------|--------------------------------|------------|-------------|-------------|-------------|-------------|-------------|------------|------------|
|                                | Total Cases                    | < 1 Year   |             | 1 - 4 Years |             | ≥ 5 Years   |             |            |            |
|                                |                                | No.        | No. (%)     | No.         | (%)         | No.         | (%)         |            |            |
| <b>Total</b>                   | <b>6274</b>                    | <b>940</b> | <b>(15)</b> | <b>1101</b> | <b>(18)</b> | <b>3699</b> | <b>(59)</b> | <b>534</b> | <b>(9)</b> |
| Mexico                         | 1308                           | 122        | (9)         | 129         | (10)        | 919         | (70)        | 138        | (11)       |
| Philippines                    | 773                            | 84         | (11)        | 104         | (13)        | 519         | (67)        | 66         | (9)        |
| India                          | 532                            | 88         | (17)        | 140         | (26)        | 266         | (50)        | 38         | (7)        |
| Vietnam                        | 456                            | 40         | (9)         | 67          | (15)        | 284         | (62)        | 65         | (14)       |
| China                          | 351                            | 42         | (12)        | 59          | (17)        | 233         | (66)        | 17         | (5)        |
| Haiti                          | 197                            | 41         | (21)        | 44          | (22)        | 99          | (50)        | 13         | (7)        |
| Guatemala                      | 193                            | 32         | (17)        | 52          | (27)        | 89          | (46)        | 20         | (10)       |
| Ethiopia                       | 162                            | 38         | (23)        | 58          | (36)        | 59          | (36)        | 7          | (4)        |
| Honduras                       | 126                            | 24         | (19)        | 22          | (17)        | 64          | (51)        | 16         | (13)       |
| El Salvador                    | 116                            | 10         | (9)         | 20          | (17)        | 80          | (69)        | 6          | (5)        |
| Myanmar                        | 116                            | 42         | (36)        | 44          | (38)        | 19          | (16)        | 11         | (9)        |
| Korea, Republic of             | 106                            | 7          | (7)         | 12          | (11)        | 79          | (75)        | 8          | (8)        |
| Somalia                        | 101                            | 28         | (28)        | 21          | (21)        | 50          | (50)        | 2          | (2)        |
| Nepal                          | 82                             | 20         | (24)        | 37          | (45)        | 23          | (28)        | 2          | (2)        |
| Peru                           | 79                             | 15         | (19)        | 13          | (16)        | 45          | (57)        | 6          | (8)        |
| Cambodia                       | 78                             | 6          | (8)         | 6           | (8)         | 54          | (69)        | 12         | (15)       |
| Dominican Republic             | 74                             | 9          | (12)        | 14          | (19)        | 47          | (64)        | 4          | (5)        |
| Pakistan                       | 68                             | 15         | (22)        | 12          | (18)        | 35          | (51)        | 6          | (9)        |
| Ecuador                        | 65                             | 9          | (14)        | 10          | (15)        | 44          | (68)        | 2          | (3)        |
| Laos                           | 64                             | 0          | (0)         | 2           | (3)         | 52          | (81)        | 10         | (16)       |
| Kenya                          | 58                             | 15         | (26)        | 21          | (36)        | 19          | (33)        | 3          | (5)        |
| Nigeria                        | 58                             | 16         | (28)        | 13          | (22)        | 29          | (50)        | 0          | (0)        |
| Bhutan                         | 57                             | 38         | (67)        | 13          | (23)        | 1           | (2)         | 5          | (9)        |
| Bangladesh                     | 54                             | 12         | (22)        | 26          | (48)        | 14          | (26)        | 2          | (4)        |
| Korea Dem People S. Republic   | 50                             | 1          | (2)         | 3           | (6)         | 36          | (72)        | 10         | (20)       |
| Indonesia                      | 41                             | 10         | (24)        | 7           | (17)        | 21          | (51)        | 3          | (7)        |
| Liberia                        | 33                             | 11         | (33)        | 7           | (21)        | 13          | (39)        | 2          | (6)        |
| Thailand                       | 33                             | 7          | (21)        | 6           | (18)        | 18          | (55)        | 2          | (6)        |
| Cuba                           | 30                             | 3          | (10)        | 0           | (0)         | 26          | (87)        | 1          | (3)        |
| Colombia                       | 25                             | 2          | (8)         | 1           | (4)         | 19          | (76)        | 3          | (12)       |
| All Others <sup>4</sup>        | 788                            | 153        | (19)        | 138         | (18)        | 443         | (56)        | 54         | (7)        |

<sup>1</sup> Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

<sup>2</sup> Ranked by total case count.

<sup>3</sup> Among foreign-born persons, the number of years since arrival in the United States before diagnosis with tuberculosis.

<sup>4</sup> Includes Not Specified for Country of Origin.

See Surveillance Slide #20.

**Table 17 Tuberculosis Cases and Rates per 100,000 Population by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2012**

**Table 17. (Con't) Tuberculosis Cases and Rates per 100,000 Population by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2012**

| Race/Ethnicity and Sex                           | All Ages     |             | Age Group |            |           |            |           |             |            |             |            |             |            |             |          |      |
|--------------------------------------------------|--------------|-------------|-----------|------------|-----------|------------|-----------|-------------|------------|-------------|------------|-------------|------------|-------------|----------|------|
|                                                  | No.          | Rate        | Under 5   |            | 5–14      |            | 15–24     |             | 25–44      |             | 45–64      |             | ≥65        |             | Unknown  |      |
|                                                  | No.          | Rate        | No.       | Rate       | No.       | Rate       | No.       | Rate        | No.        | Rate        | No.        | Rate        | No.        | Rate        | No.      | Rate |
| <b>Native Hawaiian or Other Pacific Islander</b> | <b>64</b>    | <b>12.3</b> | <b>1</b>  | <b>2.5</b> | <b>3</b>  | <b>3.8</b> | <b>11</b> | <b>12.3</b> | <b>24</b>  | <b>14.6</b> | <b>20</b>  | <b>17.7</b> | <b>5</b>   | <b>13.8</b> | <b>0</b> | --   |
| Male                                             | 34           | 12.9        | 0         | 0.0        | 1         | 2.5        | 8         | 17.4        | 11         | 13.1        | 10         | 17.9        | 4          | 24.0        | 0        | --   |
| Female                                           | 30           | 11.6        | 1         | 5.2        | 2         | 5.3        | 3         | 6.9         | 13         | 16.1        | 10         | 17.5        | 1          | 5.1         | 0        | --   |
| Unknown                                          | 0            | --          | 0         | --         | 0         | --         | 0         | --          | 0          | --          | 0          | --          | 0          | --          | 0        | --   |
| <b>White</b>                                     | <b>1,572</b> | <b>0.8</b>  | <b>17</b> | <b>0.2</b> | <b>19</b> | <b>0.1</b> | <b>63</b> | <b>0.3</b>  | <b>291</b> | <b>0.6</b>  | <b>609</b> | <b>1.0</b>  | <b>573</b> | <b>1.7</b>  | <b>0</b> | --   |
| Male                                             | 1,009        | 1.0         | 11        | 0.2        | 10        | 0.1        | 26        | 0.2         | 159        | 0.6         | 434        | 1.5         | 369        | 2.4         | 0        | --   |
| Female                                           | 562          | 0.6         | 6         | 0.1        | 9         | 0.1        | 37        | 0.3         | 132        | 0.5         | 174        | 0.6         | 204        | 1.1         | 0        | --   |
| Unknown                                          | 1            | --          | 0         | --         | 0         | --         | 0         | --          | 0          | --          | 1          | --          | 0          | --          | 0        | --   |
| <b>Multiple Race<sup>2</sup></b>                 | <b>148</b>   | <b>2.5</b>  | <b>5</b>  | <b>0.5</b> | <b>3</b>  | <b>0.2</b> | <b>13</b> | <b>1.1</b>  | <b>62</b>  | <b>4.8</b>  | <b>28</b>  | <b>3.4</b>  | <b>37</b>  | <b>12.8</b> | <b>0</b> | --   |
| Male                                             | 78           | 2.6         | 4         | 0.8        | 0         | 0.0        | 5         | 0.9         | 36         | 5.9         | 16         | 4.1         | 17         | 13.5        | 0        | --   |
| Female                                           | 70           | 2.3         | 1         | 0.2        | 3         | 0.4        | 8         | 1.4         | 26         | 3.8         | 12         | 2.8         | 20         | 12.3        | 0        | --   |
| Unknown                                          | 0            | --          | 0         | --         | 0         | --         | 0         | --          | 0          | --          | 0          | --          | 0          | --          | 0        | --   |
| <b>Unknown</b>                                   | <b>34</b>    | <b>--</b>   | <b>2</b>  | <b>--</b>  | <b>1</b>  | <b>--</b>  | <b>2</b>  | <b>--</b>   | <b>12</b>  | <b>--</b>   | <b>11</b>  | <b>--</b>   | <b>6</b>   | <b>--</b>   | <b>0</b> | --   |
| Male                                             | 22           | --          | 1         | --         | 1         | --         | 1         | --          | 7          | --          | 8          | --          | 4          | --          | 0        | --   |
| Female                                           | 12           | --          | 1         | --         | 0         | --         | 1         | --          | 5          | --          | 3          | --          | 2          | --          | 0        | --   |
| Unknown                                          | 0            | --          | 0         | --         | 0         | --         | 0         | --          | 0          | --          | 0          | --          | 0          | --          | 0        | --   |

<sup>1</sup>Persons of Hispanic or Latino origin may be of any race or multiple race.

<sup>2</sup>Indicates two or more races reported for a person.

**Note:** Denominators for computing 2012 case rates were obtained from the U.S. Census Monthly Postcensal Resident Population, by single year of age, sex, race, and Hispanic origin (<http://www.census.gov/popest/datasets/national/asrh/2012/files/NC-EST2012-ALLDATA-R-File06.csv>) (accessed August 12, 2013).

Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple Race does not include persons of Hispanic ethnicity.

See Technical Notes.

See Surveillance Slides #9 and #11.

**Table 18. Tuberculosis Cases in U.S.-born Persons by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2012**

| Race/Ethnicity and Sex                           | Age Group    |            |            |            |            |              |            | Unknown  |
|--------------------------------------------------|--------------|------------|------------|------------|------------|--------------|------------|----------|
|                                                  | All Ages     | Under 5    | 5–14       | 15–24      | 25–44      | 45–64        | ≥65        |          |
| <b>Total Cases</b>                               | <b>3,659</b> | <b>217</b> | <b>134</b> | <b>351</b> | <b>758</b> | <b>1,347</b> | <b>851</b> | <b>1</b> |
| Male                                             | 2,325        | 109        | 64         | 181        | 459        | 959          | 553        | 0        |
| Female                                           | 1,332        | 108        | 70         | 169        | 299        | 387          | 298        | 1        |
| Unknown                                          | 2            | 0          | 0          | 1          | 0          | 1            | 0          | 0        |
| <b>Hispanic or Latino<sup>1</sup></b>            | <b>691</b>   | <b>114</b> | <b>56</b>  | <b>129</b> | <b>141</b> | <b>162</b>   | <b>89</b>  | <b>0</b> |
| Male                                             | 394          | 52         | 30         | 75         | 79         | 117          | 41         | 0        |
| Female                                           | 297          | 62         | 26         | 54         | 62         | 45           | 48         | 0        |
| Unknown                                          | 0            | 0          | 0          | 0          | 0          | 0            | 0          | 0        |
| <b>American Indian or Alaska Native</b>          | <b>144</b>   | <b>7</b>   | <b>12</b>  | <b>18</b>  | <b>28</b>  | <b>47</b>    | <b>32</b>  | <b>0</b> |
| Male                                             | 76           | 3          | 6          | 5          | 20         | 24           | 18         | 0        |
| Female                                           | 67           | 4          | 6          | 12         | 8          | 23           | 14         | 0        |
| Unknown                                          | 1            | 0          | 0          | 1          | 0          | 0            | 0          | 0        |
| <b>Asian</b>                                     | <b>118</b>   | <b>30</b>  | <b>6</b>   | <b>39</b>  | <b>28</b>  | <b>4</b>     | <b>11</b>  | <b>0</b> |
| Male                                             | 66           | 17         | 2          | 17         | 22         | 0            | 8          | 0        |
| Female                                           | 52           | 13         | 4          | 22         | 6          | 4            | 3          | 0        |
| Unknown                                          | 0            | 0          | 0          | 0          | 0          | 0            | 0          | 0        |
| <b>Black or African American</b>                 | <b>1,340</b> | <b>41</b>  | <b>40</b>  | <b>107</b> | <b>326</b> | <b>571</b>   | <b>254</b> | <b>1</b> |
| Male                                             | 877          | 21         | 16         | 55         | 203        | 410          | 172        | 0        |
| Female                                           | 463          | 20         | 24         | 52         | 123        | 161          | 82         | 1        |
| Unknown                                          | 0            | 0          | 0          | 0          | 0          | 0            | 0          | 0        |
| <b>Native Hawaiian or Other Pacific Islander</b> | <b>51</b>    | <b>1</b>   | <b>3</b>   | <b>11</b>  | <b>19</b>  | <b>15</b>    | <b>2</b>   | <b>0</b> |
| Male                                             | 28           | 0          | 1          | 8          | 10         | 7            | 2          | 0        |
| Female                                           | 23           | 1          | 2          | 3          | 9          | 8            | 0          | 0        |
| Unknown                                          | 0            | 0          | 0          | 0          | 0          | 0            | 0          | 0        |
| <b>White</b>                                     | <b>1,276</b> | <b>17</b>  | <b>15</b>  | <b>42</b>  | <b>207</b> | <b>536</b>   | <b>459</b> | <b>0</b> |
| Male                                             | 861          | 11         | 9          | 19         | 120        | 392          | 310        | 0        |
| Female                                           | 414          | 6          | 6          | 23         | 87         | 143          | 149        | 0        |
| Unknown                                          | 1            | 0          | 0          | 0          | 0          | 1            | 0          | 0        |
| <b>Multiple Race<sup>2</sup></b>                 | <b>28</b>    | <b>5</b>   | <b>2</b>   | <b>4</b>   | <b>6</b>   | <b>7</b>     | <b>4</b>   | <b>0</b> |
| Male                                             | 15           | 4          | 0          | 1          | 3          | 5            | 2          | 0        |
| Female                                           | 13           | 1          | 2          | 3          | 3          | 2            | 2          | 0        |
| Unknown                                          | 0            | 0          | 0          | 0          | 0          | 0            | 0          | 0        |
| <b>Unknown</b>                                   | <b>11</b>    | <b>2</b>   | <b>0</b>   | <b>1</b>   | <b>3</b>   | <b>5</b>     | <b>0</b>   | <b>0</b> |
| Male                                             | 8            | 1          | 0          | 1          | 2          | 4            | 0          | 0        |
| Female                                           | 3            | 1          | 0          | 0          | 1          | 1            | 0          | 0        |
| Unknown                                          | 0            | 0          | 0          | 0          | 0          | 0            | 0          | 0        |

<sup>1</sup>Persons of Hispanic or Latino origin may be of any race or multiple race.

<sup>2</sup>Indicates two or more races reported for a person.

**Note:** Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple race does not include persons of Hispanic ethnicity.

See Technical Notes.

See Surveillance Slide #15.

**Table 19. Tuberculosis Cases in Foreign-born Persons<sup>1</sup> by Hispanic Ethnicity and Non-Hispanic Race, Sex, and Age Group: United States, 2012**

| Race/Ethnicity and Sex                           | Age Group    |           |           |            |              |              |              |          |
|--------------------------------------------------|--------------|-----------|-----------|------------|--------------|--------------|--------------|----------|
|                                                  | All Ages     | Under 5   | 5–14      | 15–24      | 25–44        | 45–64        | ≥65          | Unknown  |
| <b>Total Cases</b>                               | <b>6,274</b> | <b>43</b> | <b>92</b> | <b>665</b> | <b>2,359</b> | <b>1,763</b> | <b>1,350</b> | <b>2</b> |
| Male                                             | 3,697        | 24        | 46        | 371        | 1,306        | 1,129        | 819          | 2        |
| Female                                           | 2,577        | 19        | 46        | 294        | 1,053        | 634          | 531          | 0        |
| Unknown                                          | 0            | 0         | 0         | 0          | 0            | 0            | 0            | 0        |
| <b>Hispanic or Latino<sup>2</sup></b>            | <b>2,095</b> | <b>5</b>  | <b>12</b> | <b>232</b> | <b>879</b>   | <b>598</b>   | <b>368</b>   | <b>1</b> |
| Male                                             | 1,407        | 0         | 2         | 164        | 583          | 438          | 219          | 1        |
| Female                                           | 688          | 5         | 10        | 68         | 296          | 160          | 149          | 0        |
| Unknown                                          | 0            | 0         | 0         | 0          | 0            | 0            | 0            | 0        |
| <b>American Indian or Alaska Native</b>          | <b>1</b>     | <b>0</b>  | <b>0</b>  | <b>1</b>   | <b>0</b>     | <b>0</b>     | <b>0</b>     | <b>0</b> |
| Male                                             | 1            | 0         | 0         | 1          | 0            | 0            | 0            | 0        |
| Female                                           | 0            | 0         | 0         | 0          | 0            | 0            | 0            | 0        |
| Unknown                                          | 0            | 0         | 0         | 0          | 0            | 0            | 0            | 0        |
| <b>Asian</b>                                     | <b>2,835</b> | <b>26</b> | <b>42</b> | <b>256</b> | <b>883</b>   | <b>870</b>   | <b>757</b>   | <b>1</b> |
| Male                                             | 1,575        | 17        | 23        | 124        | 408          | 525          | 477          | 1        |
| Female                                           | 1,260        | 9         | 19        | 132        | 475          | 345          | 280          | 0        |
| Unknown                                          | 0            | 0         | 0         | 0          | 0            | 0            | 0            | 0        |
| <b>Black or African American</b>                 | <b>894</b>   | <b>12</b> | <b>32</b> | <b>146</b> | <b>443</b>   | <b>191</b>   | <b>70</b>    | <b>0</b> |
| Male                                             | 485          | 7         | 19        | 71         | 237          | 107          | 44           | 0        |
| Female                                           | 409          | 5         | 13        | 75         | 206          | 84           | 26           | 0        |
| Unknown                                          | 0            | 0         | 0         | 0          | 0            | 0            | 0            | 0        |
| <b>Native Hawaiian or Other Pacific Islander</b> | <b>13</b>    | <b>0</b>  | <b>0</b>  | <b>0</b>   | <b>5</b>     | <b>5</b>     | <b>3</b>     | <b>0</b> |
| Male                                             | 6            | 0         | 0         | 0          | 1            | 3            | 2            | 0        |
| Female                                           | 7            | 0         | 0         | 0          | 4            | 2            | 1            | 0        |
| Unknown                                          | 0            | 0         | 0         | 0          | 0            | 0            | 0            | 0        |
| <b>White</b>                                     | <b>295</b>   | <b>0</b>  | <b>4</b>  | <b>21</b>  | <b>84</b>    | <b>72</b>    | <b>114</b>   | <b>0</b> |
| Male                                             | 147          | 0         | 1         | 7          | 39           | 41           | 59           | 0        |
| Female                                           | 148          | 0         | 3         | 14         | 45           | 31           | 55           | 0        |
| Unknown                                          | 0            | 0         | 0         | 0          | 0            | 0            | 0            | 0        |
| <b>Multiple Race<sup>3</sup></b>                 | <b>120</b>   | <b>0</b>  | <b>1</b>  | <b>9</b>   | <b>56</b>    | <b>21</b>    | <b>33</b>    | <b>0</b> |
| Male                                             | 63           | 0         | 0         | 4          | 33           | 11           | 15           | 0        |
| Female                                           | 57           | 0         | 1         | 5          | 23           | 10           | 18           | 0        |
| Unknown                                          | 0            | 0         | 0         | 0          | 0            | 0            | 0            | 0        |
| <b>Unknown</b>                                   | <b>21</b>    | <b>0</b>  | <b>1</b>  | <b>0</b>   | <b>9</b>     | <b>6</b>     | <b>5</b>     | <b>0</b> |
| Male                                             | 13           | 0         | 1         | 0          | 5            | 4            | 3            | 0        |
| Female                                           | 8            | 0         | 0         | 0          | 4            | 2            | 2            | 0        |
| Unknown                                          | 0            | 0         | 0         | 0          | 0            | 0            | 0            | 0        |

<sup>1</sup> Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

<sup>2</sup> Persons of Hispanic or Latino ethnicity may be of any race or multiple race.

<sup>3</sup> Indicates two or more races reported for a person.

**Note:** Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple race does not include persons of Hispanic ethnicity.

See Technical Notes.

See Surveillance Slide #15.

**Table 20. Tuberculosis Cases Among Foreign-born Persons<sup>1</sup> by Country of Birth<sup>2</sup>: United States, 2012**

| <b>African Region</b>    |    |               |     |                       |    |
|--------------------------|----|---------------|-----|-----------------------|----|
| <b>Total Cases = 562</b> |    |               |     |                       |    |
| Algeria                  | 6  | Ethiopia      | 162 | Niger                 | 0  |
| Angola                   | 5  | Gabon         | 2   | Nigeria               | 58 |
| Benin                    | 1  | Gambia        | 8   | Rwanda                | 7  |
| Botswana                 | 4  | Ghana         | 17  | Sao Tome and Principe | 0  |
| Burkina Faso             | 2  | Guinea        | 8   | Senegal               | 9  |
| Burundi                  | 8  | Guinea-Bissau | 1   | Seychelles            | 0  |
| Cameroon                 | 21 | Kenya         | 58  | Sierra Leone          | 24 |
| Cape Verde               | 6  | Lesotho       | 0   | South Africa          | 14 |
| Central African Republic | 6  | Liberia       | 33  | Swaziland             | 1  |
| Chad                     | 0  | Madagascar    | 3   | Tanzania, UR          | 5  |
| Comoros                  | 1  | Malawi        | 4   | Togo                  | 0  |
| Congo, Republic of       | 23 | Mali          | 5   | Uganda                | 11 |
| Côte d'Ivoire            | 8  | Mauritania    | 5   | Zambia                | 5  |
| DR Congo                 | 0  | Mauritius     | 0   | Zimbabwe              | 4  |
| Equatorial Guinea        | 0  | Mozambique    | 3   |                       |    |
| Eritrea                  | 24 | Namibia       | 0   |                       |    |

**Americas Region**  
**Total Cases = 2,356**

|                        |    |                    |      |                          |    |
|------------------------|----|--------------------|------|--------------------------|----|
| Anguilla               | 1  | Costa Rica         | 1    | Netherland Antilles      | 0  |
| Antigua and Barbuda    | 0  | Cuba               | 30   | Nicaragua                | 16 |
| Argentina              | 7  | Dominica           | 0    | Panama                   | 4  |
| Bahamas                | 2  | Dominican Republic | 74   | Paraguay                 | 0  |
| Barbados               | 1  | Ecuador            | 65   | Peru                     | 79 |
| Belize                 | 6  | El Salvador        | 116  | St. Kitts and Nevis      | 0  |
| Bermuda                | 0  | Grenada            | 1    | St. Lucia                | 1  |
| Bolivia                | 17 | Guatemala          | 193  | St. Vincent & Grenadines | 0  |
| Brazil                 | 24 | Guyana             | 18   | Suriname                 | 0  |
| British Virgin Islands | 0  | Haiti              | 197  | Trinidad and Tobago      | 10 |
| Canada                 | 7  | Honduras           | 126  | Turks and Caicos Islands | 0  |
| Cayman Islands         | 0  | Jamaica            | 14   | Uruguay                  | 1  |
| Chile                  | 2  | Mexico             | 1308 | Venezuela                | 10 |
| Colombia               | 25 | Montserrat         | 0    |                          |    |

**Eastern Mediterranean Region**  
**Total Cases = 268**

|                           |    |                        |     |                      |    |
|---------------------------|----|------------------------|-----|----------------------|----|
| Afghanistan               | 16 | Lebanon                | 4   | Sudan                | 11 |
| Bahrain                   | 0  | Libyan Arab Jamahiriya | 4   | Syrian Arab Republic | 3  |
| Djibouti                  | 4  | Morocco                | 8   | Tunisia              | 1  |
| Egypt                     | 8  | Oman                   | 0   | United Arab Emirates | 1  |
| Iran, Islamic Republic of | 12 | Pakistan               | 68  | West Bank and Gaza   | 0  |
| Iraq                      | 12 | Qatar                  | 0   | Yemen                | 5  |
| Jordan                    | 1  | Saudi Arabia           | 8   |                      |    |
| Kuwait                    | 1  | Somalia                | 101 |                      |    |

**Table 20. (Cont'd) Tuberculosis Cases Among Foreign-born Persons<sup>1</sup> by Country of Birth<sup>2</sup>: United States, 2012**

| <b>European Region</b>   |    |                      |   |                    |    |
|--------------------------|----|----------------------|---|--------------------|----|
| <b>Total Cases = 179</b> |    |                      |   |                    |    |
| Albania                  | 8  | Greece               | 6 | Poland             | 18 |
| Andorra                  | 0  | Hungary              | 0 | Portugal           | 8  |
| Armenia                  | 6  | Iceland              | 0 | Romania            | 11 |
| Austria                  | 0  | Ireland              | 2 | Russian Federation | 17 |
| Azerbaijan               | 2  | Israel               | 2 | San Marino         | 0  |
| Belarus                  | 0  | Italy                | 6 | Serbia             | 3  |
| Belgium                  | 1  | Kazakhstan           | 3 | Slovakia           | 0  |
| Bosnia and Herzegovina   | 15 | Kyrgyzstan           | 1 | Slovenia           | 1  |
| Bulgaria                 | 3  | Latvia               | 1 | Spain              | 3  |
| Croatia                  | 1  | Lithuania            | 1 | Sweden             | 0  |
| Cyprus                   | 0  | Luxembourg           | 0 | Switzerland        | 2  |
| Czech Republic           | 1  | Macedonia, TFYR      | 0 | Tajikistan         | 0  |
| Denmark                  | 0  | Malta                | 0 | Turkey             | 4  |
| Estonia                  | 0  | Moldova, Republic of | 3 | Turkmenistan       | 1  |
| Finland                  | 0  | Monaco               | 0 | Ukraine            | 22 |
| France                   | 4  | Montenegro           | 1 | United Kingdom     | 6  |
| Georgia                  | 5  | Netherlands          | 2 | Uzbekistan         | 3  |
| Germany                  | 6  | Norway               | 0 |                    |    |

| <b>Southeast Asia Region</b> |     |            |     |             |    |
|------------------------------|-----|------------|-----|-------------|----|
| <b>Total Cases = 970</b>     |     |            |     |             |    |
| Bangladesh                   | 54  | Korea, DPR | 50  | Sri Lanka   | 5  |
| Bhutan                       | 57  | Maldives   | 0   | Thailand    | 33 |
| India                        | 532 | Myanmar    | 116 | Timor-Leste | 0  |
| Indonesia                    | 41  | Nepal      | 82  |             |    |

| <b>Western Pacific Region</b> |     |                  |     |                   |     |
|-------------------------------|-----|------------------|-----|-------------------|-----|
| <b>Total Cases = 1,901</b>    |     |                  |     |                   |     |
| Australia                     | 0   | Kiribati         | 0   | Philippines       | 773 |
| Brunei Darussalam             | 0   | Korea, Rep.      | 106 | Samoa             | 1   |
| Cambodia                      | 78  | Lao, PDR         | 64  | Singapore         | 1   |
| China                         | 351 | Malaysia         | 17  | Solomon Islands   | 0   |
| China, Hong Kong SAR          | 23  | Mongolia         | 12  | Tokelau           | 0   |
| China, Macao SAR              | 0   | Nauru            | 0   | Tonga             | 3   |
| Cook Islands                  | 1   | New Caledonia    | 0   | Tuvalu            | 0   |
| Fiji                          | 1   | New Zealand      | 0   | Vanuatu           | 1   |
| French Polynesia              | 0   | Niue             | 0   | Vietnam           | 456 |
| Japan                         | 13  | Papua New Guinea | 0   | Wallis and Futuna | 0   |

| <b>Other<sup>3</sup></b> |  |  |  |  |  |
|--------------------------|--|--|--|--|--|
| <b>Total Cases = 28</b>  |  |  |  |  |  |
|                          |  |  |  |  |  |

| <b>Unknown</b>          |  |  |  |  |  |
|-------------------------|--|--|--|--|--|
| <b>Total Cases = 10</b> |  |  |  |  |  |
|                         |  |  |  |  |  |

<sup>1</sup> Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands

<sup>2</sup> Country as reported by patient.

<sup>3</sup> Includes country codes currently reported via the National Tuberculosis Surveillance System that are not represented by WHO member states.

**Note:** Regional composition of countries based on WHO Report *Global Tuberculosis Report 2012*, World Health Organization ([http://www.who.int/tb/publications/global\\_report/en/index.html](http://www.who.int/tb/publications/global_report/en/index.html)).

**Table 21. Tuberculosis Risk Factors<sup>1</sup> by Origin and Race/Ethnicity: United States, 2012**

|                                      | Total Eligible Cases <sup>2</sup> | MDR Patient Contact | Missed Contact  | Infectious TB Patient Contact | Incomplete LTBI therapy | TNF-Alpha Therapy | Post-organ Transplantation | Diabetes Mellitus  | Renal Disease    | Immuno-suppression | Other              | None               | Unknown          |
|--------------------------------------|-----------------------------------|---------------------|-----------------|-------------------------------|-------------------------|-------------------|----------------------------|--------------------|------------------|--------------------|--------------------|--------------------|------------------|
| <b>United States</b>                 | <b>9933</b>                       | <b>15 (0.2)</b>     | <b>45 (0.5)</b> | <b>749 (7.5)</b>              | <b>262 (2.6)</b>        | <b>52 (0.5)</b>   | <b>46 (0.5)</b>            | <b>1441 (14.5)</b> | <b>222 (2.2)</b> | <b>416 (4.2)</b>   | <b>2203 (22.2)</b> | <b>4947 (49.8)</b> | <b>367 (3.7)</b> |
| <b>U.S.-born Total</b>               | <b>3659</b>                       | <b>8 (0.2)</b>      | <b>33 (0.9)</b> | <b>501 (13.7)</b>             | <b>132 (3.6)</b>        | <b>18 (0.5)</b>   | <b>20 (0.5)</b>            | <b>468 (12.8)</b>  | <b>87 (2.4)</b>  | <b>195 (5.3)</b>   | <b>887 (24.2)</b>  | <b>1571 (42.9)</b> | <b>137 (3.7)</b> |
| American Indian/<br>Alaska Native    | 144                               | 0 (0.0)             | 0 (0.0)         | 36 (25.0)                     | 9 (6.3)                 | 0 (0.0)           | 1 (0.7)                    | 26 (18.1)          | 8 (5.6)          | 1 (0.7)            | 18 (12.5)          | 60 (41.7)          | 3 (2.1)          |
| Asian                                | 118                               | 2 (1.7)             | 0 (0.0)         | 35 (29.7)                     | 4 (3.4)                 | 0 (0.0)           | 0 (0.0)                    | 10 (8.5)           | 0 (0.0)          | 3 (2.5)            | 21 (17.8)          | 51 (43.2)          | 0 (0.0)          |
| Black/African American               | 1340                              | 2 (0.1)             | 21 (1.6)        | 191 (14.3)                    | 59 (4.4)                | 2 (0.1)           | 4 (0.3)                    | 165 (12.3)         | 32 (2.4)         | 73 (5.4)           | 326 (24.3)         | 572 (42.7)         | 57 (4.3)         |
| Hispanic <sup>3</sup>                | 691                               | 2 (0.3)             | 2 (0.3)         | 112 (16.2)                    | 17 (2.5)                | 2 (0.3)           | 1 (0.1)                    | 117 (16.9)         | 16 (2.3)         | 16 (2.3)           | 168 (24.3)         | 312 (45.2)         | 10 (1.4)         |
| Multiple Race <sup>4</sup>           | 28                                | 0 (0.0)             | 1 (3.6)         | 7 (25.0)                      | 0 (0.0)                 | 0 (0.0)           | 3 (10.7)                   | 0 (0.0)            | 0 (0.0)          | 9 (32.1)           | 7 (25.0)           | 1 (3.6)            |                  |
| Native Hawaiian/<br>Pacific Islander | 51                                | 1 (2.0)             | 0 (0.0)         | 8 (15.7)                      | 2 (3.9)                 | 0 (0.0)           | 1 (2.0)                    | 16 (31.4)          | 5 (9.8)          | 2 (3.9)            | 6 (11.8)           | 17 (33.3)          | 1 (2.0)          |
| White                                | 1276                              | 1 (0.1)             | 9 (0.7)         | 110 (8.6)                     | 41 (3.2)                | 14 (1.1)          | 13 (1.0)                   | 131 (10.3)         | 26 (2.0)         | 99 (7.8)           | 338 (26.5)         | 549 (43.0)         | 61 (4.8)         |
| Unknown                              | 11                                | 0 (0.0)             | 0 (0.0)         | 2 (18.2)                      | 0 (0.0)                 | 0 (0.0)           | 0 (0.0)                    | 0 (0.0)            | 1 (0.0)          | 1 (9.1)            | 1 (9.1)            | 3 (27.3)           | 4 (36.4)         |

**Table 21. (Cont'd) Tuberculosis Risk Factors<sup>1</sup> by Origin and Race/Ethnicity: United States, 2012**

|                                      | Total Eligible Cases <sup>2</sup> | MDR Patient Contact |              | Infectious TB Contact |              | Incomplete Patient Contact |              | TNF-Alpha Therapy | Post-organ Transplantation | Diabetes Mellitus | Renal Disease | Immuno-suppression | Other        | None        | Unknown       |            |              |            |              |             |               |             |               |            |              |
|--------------------------------------|-----------------------------------|---------------------|--------------|-----------------------|--------------|----------------------------|--------------|-------------------|----------------------------|-------------------|---------------|--------------------|--------------|-------------|---------------|------------|--------------|------------|--------------|-------------|---------------|-------------|---------------|------------|--------------|
|                                      |                                   | No.                 | (%)          | No.                   | (%)          | No.                        | (%)          | No.               | (%)                        | No.               | (%)           | No.                | (%)          | No.         | (%)           |            |              |            |              |             |               |             |               |            |              |
| <b>United States</b>                 | <b>9933</b>                       | <b>15</b>           | <b>(0.2)</b> | <b>45</b>             | <b>(0.5)</b> | <b>749</b>                 | <b>(7.5)</b> | <b>262</b>        | <b>(2.6)</b>               | <b>52</b>         | <b>(0.5)</b>  | <b>46</b>          | <b>(0.5)</b> | <b>1441</b> | <b>(14.5)</b> | <b>222</b> | <b>(2.2)</b> | <b>416</b> | <b>(4.2)</b> | <b>2203</b> | <b>(22.2)</b> | <b>4947</b> | <b>(49.8)</b> | <b>367</b> | <b>(3.7)</b> |
| <b>Foreign-born Total</b>            | <b>6274</b>                       | <b>7</b>            | <b>(0.1)</b> | <b>12</b>             | <b>(0.2)</b> | <b>248</b>                 | <b>(4.0)</b> | <b>130</b>        | <b>(2.1)</b>               | <b>34</b>         | <b>(0.5)</b>  | <b>26</b>          | <b>(0.4)</b> | <b>973</b>  | <b>(15.5)</b> | <b>135</b> | <b>(2.2)</b> | <b>221</b> | <b>(3.5)</b> | <b>1316</b> | <b>(21.0)</b> | <b>3376</b> | <b>(53.8)</b> | <b>230</b> | <b>(3.7)</b> |
| American Indian/<br>Alaska Native    | 1                                 | 0                   | (0.0)        | 0                     | (0.0)        | 0                          | (0.0)        | 0                 | (0.0)                      | 0                 | (0.0)         | 0                  | (0.0)        | 0           | (0.0)         | 0          | (0.0)        | 0          | (0.0)        | 0           | (100.0)       | 0           | (0.0)         |            |              |
| Asian                                | 2835                              | 3                   | (0.1)        | 4                     | (0.1)        | 97                         | (3.4)        | 59                | (2.1)                      | 21                | (0.7)         | 16                 | (0.6)        | 488         | (17.2)        | 79         | (2.8)        | 122        | (4.3)        | 613         | (21.6)        | 1457        | (51.4)        | 106        | (3.7)        |
| Black/African American               | 894                               | 1                   | (0.1)        | 4                     | (0.4)        | 47                         | (5.3)        | 22                | (2.5)                      | 0                 | (0.0)         | 2                  | (0.2)        | 67          | (7.5)         | 5          | (0.6)        | 25         | (2.8)        | 162         | (18.1)        | 555         | (62.1)        | 37         | (4.1)        |
| Hispanic <sup>3</sup>                | 2095                              | 3                   | (0.1)        | 4                     | (0.2)        | 93                         | (4.4)        | 44                | (2.1)                      | 10                | (0.5)         | 6                  | (0.3)        | 364         | (17.4)        | 45         | (2.1)        | 50         | (2.4)        | 440         | (21.0)        | 1123        | (53.6)        | 64         | (3.1)        |
| Multiple Race <sup>4</sup>           | 120                               | 0                   | (0.0)        | 0                     | (0.0)        | 1                          | (0.8)        | 1                 | (0.8)                      | 0                 | (0.0)         | 1                  | (0.8)        | 15          | (12.5)        | 1          | (0.8)        | 7          | (5.8)        | 26          | (21.7)        | 68          | (56.7)        | 4          | (3.3)        |
| Native Hawaiian/<br>Pacific Islander | 13                                | 0                   | (0.0)        | 0                     | (0.0)        | 0                          | (0.0)        | 0                 | (0.0)                      | 0                 | (0.0)         | 0                  | (0.0)        | 3           | (23.1)        | 1          | (7.7)        | 0          | (0.0)        | 2           | (15.4)        | 7           | (53.8)        | 2          | (15.4)       |
| White                                | 295                               | 0                   | (0.0)        | 0                     | (0.0)        | 10                         | (3.4)        | 4                 | (1.4)                      | 3                 | (1.0)         | 1                  | (0.3)        | 34          | (11.5)        | 2          | (0.7)        | 16         | (5.4)        | 70          | (23.7)        | 153         | (51.9)        | 13         | (4.4)        |
| Unknown                              | 21                                | 0                   | (0.0)        | 0                     | (0.0)        | 0                          | (0.0)        | 0                 | (0.0)                      | 0                 | (0.0)         | 0                  | (0.0)        | 2           | (9.5)         | 2          | (9.5)        | 1          | (4.8)        | 3           | (14.3)        | 12          | (57.1)        | 4          | (19.0)       |

<sup>1</sup>Includes the number of risk factors reported (which may be more than one per case) and the number of cases with no information on additional risk factors. The sum of risk factors is greater than the total number of cases because more than one risk factor may be selected per case.

<sup>2</sup>Excludes TB risk factor information for 12 cases with unknown origin

<sup>3</sup>Persons of Hispanic or Latino origin may be of any race or multiple race.

<sup>4</sup>Indicates two or more races reported for a person.

**Note:** Case counts for race categories (American Indian or Alaska Native, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple Race does not include persons of Hispanic ethnicity.

**Table 22. Epidemiologic Characteristics of Cases in GENType Clusters<sup>1</sup> by Alert Levels Based on Log-likelihood Ratios (LLR)<sup>2</sup>:**  
**United States, 2010–2012**

| Case Characteristics                   | Unique<br>No. | Clustered<br>(%) | Alert Levels for Clustered Cases <sup>3</sup> |               |                         |               |                   |               |
|----------------------------------------|---------------|------------------|-----------------------------------------------|---------------|-------------------------|---------------|-------------------|---------------|
|                                        |               |                  | Non-alerted<br>(LLR <5)                       |               | Medium<br>(LLR 5 – <10) |               | High<br>(LLR ≥10) |               |
| <b>Total</b>                           | <b>17,659</b> | <b>(78.9)</b>    | <b>4,723</b>                                  | <b>(21.1)</b> | <b>2,600</b>            | <b>(55.0)</b> | <b>1,089</b>      | <b>(23.1)</b> |
| <b>Race and Ethnicity</b>              |               |                  |                                               |               |                         |               |                   |               |
| Hispanic or Latino                     | 4,907         | (77.3)           | 1,442                                         | (22.7)        | 946                     | (65.6)        | 313               | (21.7)        |
| American Indian/Alaska Native          | 175           | (51.5)           | 165                                           | (48.5)        | 22                      | (13.3)        | 43                | (26.1)        |
| Asian                                  | 5,794         | (88.0)           | 791                                           | (12.0)        | 659                     | (83.3)        | 89                | (11.2)        |
| Black or African American              | 3,484         | (69.3)           | 1,546                                         | (30.7)        | 623                     | (40.3)        | 406               | (26.3)        |
| Native Hawaiian/Other Pacific Islander | 91            | (57.2)           | 68                                            | (42.8)        | 26                      | (38.2)        | 27                | (39.7)        |
| White                                  | 2,869         | (81.1)           | 671                                           | (18.9)        | 302                     | (45.0)        | 203               | (30.2)        |
| Multiple Race                          | 300           | (91.5)           | 28                                            | (8.5)         | 17                      | (60.7)        | 3                 | (10.7)        |
| Unknown or Missing                     | 39            | (76.5)           | 12                                            | (23.5)        | 5                       | (41.7)        | 5                 | (41.7)        |
| <b>Age Group (Years)</b>               |               |                  |                                               |               |                         |               |                   |               |
| 0–4                                    | 69            | (29.7)           | 163                                           | (70.3)        | 76                      | (46.6)        | 57                | (35.0)        |
| 5–14                                   | 122           | (62.6)           | 73                                            | (37.4)        | 50                      | (68.5)        | 14                | (19.2)        |
| 15–24                                  | 1,762         | (73.8)           | 625                                           | (26.2)        | 355                     | (56.8)        | 159               | (25.4)        |
| 25–44                                  | 5,745         | (78.7)           | 1,552                                         | (21.3)        | 846                     | (54.5)        | 361               | (23.3)        |
| 45–64                                  | 5,365         | (75.5)           | 1,744                                         | (24.5)        | 891                     | (51.1)        | 391               | (22.4)        |
| ≥65                                    | 4,593         | (89.1)           | 565                                           | (10.9)        | 382                     | (67.6)        | 106               | (18.8)        |
| Unknown                                | 3             | (75.0)           | 1                                             | (25.0)        | 0                       | 0.0           | 1                 | (100.0)       |
| <b>Origin of Birth</b>                 |               |                  |                                               |               |                         |               |                   |               |
| U.S.-born                              | 5,442         | (66.4)           | 2,755                                         | (33.6)        | 1,122                   | (40.7)        | 753               | (27.3)        |
| Foreign-born                           | 12,203        | (86.2)           | 1,958                                         | (13.8)        | 1,475                   | (75.3)        | 335               | (17.1)        |
| Unknown or Missing                     | 14            | (58.3)           | 10                                            | (41.7)        | 3                       | (30.0)        | 1                 | (10.0)        |
| <b>Disease Site</b>                    |               |                  |                                               |               |                         |               |                   |               |
| Pulmonary Only                         | 12,129        | (76.9)           | 3,635                                         | (23.1)        | 1,966                   | (54.1)        | 857               | (23.6)        |
| Extrapulmonary                         | 3,208         | (86.8)           | 487                                           | (13.2)        | 300                     | (61.6)        | 101               | (20.7)        |
| Both                                   | 600           | (20.6)           | 2,308                                         | (79.4)        | 334                     | (55.7)        | 131               | (21.8)        |
| Unknown                                | 14            | (93.3)           | 1                                             | (6.7)         | 0                       | 0.0           | 0                 | 0.0           |
| <b>Sputum Smear</b>                    |               |                  |                                               |               |                         |               |                   |               |
| Positive                               | 7,907         | (75.6)           | 2,550                                         | (24.4)        | 1,364                   | (53.5)        | 617               | (24.2)        |
| Negative                               | 7,139         | (81.2)           | 1,647                                         | (18.8)        | 940                     | (57.1)        | 346               | (21.0)        |
| Not Done                               | 2,592         | (83.2)           | 524                                           | (16.8)        | 295                     | (56.3)        | 126               | (24.0)        |
| Unknown or Missing                     | 21            | (91.3)           | 2                                             | (8.7)         | 1                       | (50.0)        | 0                 | 0.0           |
| <b>Cavitory disease</b>                |               |                  |                                               |               |                         |               |                   |               |
| Yes                                    | 263           | (72.1)           | 102                                           | (27.9)        | 49                      | (48.0)        | 30                | (29.4)        |
| No                                     | 1,634         | (79.2)           | 430                                           | (20.8)        | 240                     | (55.8)        | 88                | (20.5)        |
| Unknown or Missing                     | 411           | (85.8)           | 68                                            | (14.2)        | 45                      | (66.2)        | 13                | (19.1)        |

**Table 22. (Con't) Epidemiologic Characteristics of Cases in GENType Clusters<sup>1</sup> by Alert Levels Based on Log-likelihood Ratios (LLR)<sup>2</sup>: United States, 2010–2012**

| Case Characteristics                                              | Unique |        | Alert Levels for Clustered Cases <sup>3</sup> |                         |       |        |                         |        |     |        |
|-------------------------------------------------------------------|--------|--------|-----------------------------------------------|-------------------------|-------|--------|-------------------------|--------|-----|--------|
|                                                                   | No.    | (%)    | Clustered                                     | Non-alerted<br>(LLR <5) |       |        | Medium<br>(LLR 5 – <10) |        |     |        |
|                                                                   |        |        |                                               | No.                     | (%)   | No.    | (%)                     | No.    | (%) |        |
| <b>Homeless Within Past Year</b>                                  |        |        |                                               |                         |       |        |                         |        |     |        |
| Yes                                                               | 748    | (56.5) | 575                                           | (43.5)                  | 192   | (33.4) | 95                      | (16.5) | 288 | (50.1) |
| No                                                                | 16,732 | (80.3) | 4,102                                         | (19.7)                  | 2,379 | (58.0) | 982                     | (23.9) | 741 | (18.1) |
| Unknown or Missing                                                | 179    | (79.6) | 46                                            | (20.4)                  | 29    | (63.0) | 12                      | (26.1) | 5   | (10.9) |
| <b>Excess Alcohol Use Within the Past Year</b>                    |        |        |                                               |                         |       |        |                         |        |     |        |
| Yes                                                               | 1,903  | (63.3) | 1,104                                         | (36.7)                  | 447   | (40.5) | 258                     | (23.4) | 399 | (36.1) |
| No                                                                | 15,416 | (81.4) | 3,527                                         | (18.6)                  | 2,100 | (59.5) | 809                     | (22.9) | 618 | (17.5) |
| Unknown or Missing                                                | 340    | (80.2) | 92                                            | (21.8)                  | 53    | (57.6) | 22                      | (23.9) | 17  | (18.5) |
| <b>Injecting Drug Use Within Past Year</b>                        |        |        |                                               |                         |       |        |                         |        |     |        |
| Yes                                                               | 200    | (61.5) | 125                                           | (38.5)                  | 59    | (47.2) | 25                      | (20.0) | 41  | (32.8) |
| No                                                                | 17,111 | (79.2) | 4,490                                         | (20.8)                  | 2,484 | (55.3) | 1,042                   | (23.2) | 964 | (21.5) |
| Unknown or Missing                                                | 348    | (76.3) | 108                                           | (23.7)                  | 57    | (52.8) | 22                      | (20.4) | 29  | (26.8) |
| <b>Non-Injecting Drug Use Within Past Year</b>                    |        |        |                                               |                         |       |        |                         |        |     |        |
| Yes                                                               | 958    | (56.9) | 725                                           | (43.1)                  | 292   | (40.3) | 178                     | (24.5) | 255 | (35.2) |
| No                                                                | 16,329 | (80.8) | 3,890                                         | (19.2)                  | 2,250 | (57.8) | 890                     | (22.9) | 750 | (19.3) |
| Unknown or Missing                                                | 372    | (77.5) | 108                                           | (22.5)                  | 58    | (53.7) | 21                      | (19.4) | 29  | (26.9) |
| <b>Resident of a Correction Facility at the Time of Diagnosis</b> |        |        |                                               |                         |       |        |                         |        |     |        |
| Yes                                                               | 646    | (71.9) | 252                                           | (28.1)                  | 125   | (49.6) | 54                      | (21.4) | 73  | (29.0) |
| No                                                                | 16,888 | (79.2) | 4,434                                         | (20.8)                  | 2,450 | (55.2) | 1,028                   | (23.2) | 956 | (21.6) |
| Unknown or Missing                                                | 125    | (77.2) | 37                                            | (22.8)                  | 25    | (67.6) | 7                       | (18.9) | 5   | (13.5) |
| <b>HIV Status</b>                                                 |        |        |                                               |                         |       |        |                         |        |     |        |
| Positive                                                          | 965    | (70.6) | 402                                           | (29.4)                  | 201   | (50.0) | 64                      | (15.9) | 137 | (34.1) |
| Negative                                                          | 12,883 | (78.9) | 3,454                                         | (21.1)                  | 1,823 | (52.8) | 866                     | (25.1) | 765 | (22.1) |
| Refused                                                           | 733    | (86.3) | 116                                           | (13.7)                  | 73    | (62.9) | 30                      | (25.9) | 13  | (11.2) |
| Not Offered                                                       | 1,379  | (82.4) | 295                                           | (17.6)                  | 168   | (56.9) | 66                      | (22.4) | 61  | (20.7) |
| Unknown, Missing or Indeterminate                                 | 1,699  | (78.8) | 456                                           | (21.2)                  | 335   | (73.5) | 63                      | (13.8) | 58  | (12.7) |
| <b>Multi-Drug Resistant TB</b>                                    |        |        |                                               |                         |       |        |                         |        |     |        |
| Yes                                                               | 251    | (82.6) | 53                                            | (17.4)                  | 41    | (77.4) | 12                      | (22.6) | 0   | (0.0)  |
| No                                                                | 16,985 | (78.9) | 4,552                                         | (21.1)                  | 2,505 | (55.0) | 1,049                   | (23.0) | 998 | (21.9) |
| Unknown or Missing                                                | 423    | (78.2) | 118                                           | (21.8)                  | 54    | (45.7) | 28                      | (23.7) | 36  | (30.5) |

<sup>1</sup> GENType clusters have two or more cases with matching spoligotype and 24-locus locus mycobacterial interspersed repetitive unit-variable tandem repeat type within a county during the specified 3-year time period.

<sup>2</sup> Alert levels are based on a log-likelihood ratio (LLR), which calculates the geographic concentration of a genotype in a county compared to the rest of the county during a 3-year period.

<sup>3</sup> There were 4,723 cases in alerted clusters; 1,034 cases were in 112 (7.3%) High Alert clusters; 1,089 cases were in 361 (23.4%) medium alert clusters and 2,600 were in 1,069 (69.3%) Non-alerted clusters.

**Note:** Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple Race does not include persons of Hispanic ethnicity.  
See Surveillance Slide #36

**Table 23. Tuberculosis Cases by Cluster Status<sup>1</sup>: United States, 2010–2012**

| Cluster Status         | Cases         |                |
|------------------------|---------------|----------------|
|                        | No.           | (%)            |
| <b>Total</b>           | <b>22,382</b> | <b>(100.0)</b> |
| Unique <sup>2</sup>    | 17,659        | (78.9)         |
| Clustered <sup>3</sup> | 4,723         | (21.1)         |

<sup>1</sup> Cluster status indicates whether a case is unique or clustered within a county.

<sup>2</sup> A unique case is a case with a spoligotype and 24 locus mycobacterial interspersed repetitive unit-variable number tandem repeat type (GENType) that does not match any other case in that county during the specified three-year time period.

<sup>3</sup> Clustered cases are defined as two or more cases with same GENType within a county during the specified 3-year time period.

See Surveillance Slide #34

**Table 24. Tuberculosis Cases and Clusters by Cluster Size<sup>1</sup>: United States, 2010–2012**

| Cluster Size       | Clusters     |                  | Cases <sup>2</sup> |                  |
|--------------------|--------------|------------------|--------------------|------------------|
|                    | No.          | (%) <sup>3</sup> | No.                | (%) <sup>4</sup> |
| <b>Total</b>       | <b>1,542</b> | <b>(100.0)</b>   | <b>4,723</b>       | <b>(100.0)</b>   |
| 2-case cluster     | 996          | (64.6)           | 1,992              | (42.2)           |
| 3-case cluster     | 257          | (16.7)           | 771                | (16.3)           |
| 4–9 case cluster   | 250          | (16.2)           | 1,272              | (26.9)           |
| 10–19 case cluster | 30           | (2.0)            | 365                | (7.7)            |
| ≥20 case cluster   | 9            | (0.6)            | 323                | (6.8)            |

<sup>1</sup> Clusters have two or more cases with matching spoligotype and 24-locus locus mycobacterial interspersed repetitive unit-variable number tandem repeat type (GENTType) within a county during the specified 3-year time period .

<sup>2</sup> Cases with matching spoligotype and 24-locus locus mycobacterial interspersed repetitive unit-variable number tandem repeat type (GENTType) are members of a cluster within a county during the specified 3-year time period.

<sup>3</sup> Denominator is total number of clusters

<sup>4</sup> Denominator is total number of cases

See Surveillance Slide #35.

**Table 25. Ten Most Frequently Reported GENTypes<sup>1</sup> Among Genotyped Tuberculosis Cases: United States, 2010–2012**

| GENType | PCRTyp <sup>2</sup> | Spoligotype     | 24-locus MIRU-VNTR |              | TB Cases with GENType <sup>3</sup> |        | Reporting Areas <sup>4</sup> with GENType |
|---------|---------------------|-----------------|--------------------|--------------|------------------------------------|--------|-------------------------------------------|
|         |                     |                 |                    |              | No.                                | (%)    |                                           |
| G00010  | PCR00002            | 000000000003771 | 223325173533       | 444534423428 | 180                                | (0.79) | 25                                        |
| G00017  | PCR00803            | 000000000003771 | 222325173533       | 445644423328 | 178                                | (0.78) | 18                                        |
| G00012  | PCR00002            | 000000000003771 | 223325173533       | 445644423328 | 124                                | (0.54) | 28                                        |
| G00016  | PCR00041            | 677777477413771 | 254326223432       | 14a843263217 | 114                                | (0.50) | 31                                        |
| G00011  | PCR00015            | 777776777760601 | 224325153323       | 444234423337 | 109                                | (0.48) | 30                                        |
| G05056  | PCR00041            | 677777477413771 | 254326223432       | 14a943263217 | 102                                | (0.45) | 23                                        |
| G10345  | PCR00160            | 777776777760601 | 224325143323       | 244234423337 | 96                                 | (0.42) | 9                                         |
| G00014  | PCR00051            | 776037777760771 | 223125163324       | 242434223525 | 79                                 | (0.34) | 20                                        |
| G00013  | PCR00016            | 700036777760731 | 222325143223       | 434534412334 | 77                                 | (0.34) | 20                                        |
| G00020  | PCR01328            | 776377777760751 | 333325153222       | 351544223229 | 67                                 | (0.29) | 14                                        |

<sup>1</sup> GENType is defined as a unique combination of spoligotype and 24-locus mycobacterial interspersed repetitive unit-variable number tandem repeat (MIRU-VNTR) type.

<sup>2</sup> PCRTyp<sup>e</sup> is defined as a unique combination of spoligotype and 12-locus MIRU-VNTR; every GENType has a corresponding PCRTyp<sup>e</sup>.

<sup>3</sup> Among 23,033 cases with GENTypes during 2010–2012.

<sup>4</sup> This table reflects common GENTypes for the 50 states and the District of Columbia; for common GENTypes in the United States Affiliated Pacific Islands, please see Table 26.

**Table 26. Five Most Frequently Reported GENTypes<sup>1</sup> Among Genotyped Tuberculosis Cases: United States Affiliated Pacific Islands, 2010–2012**

| GENType | PCRTyp <sup>2</sup> | Spoligotype     | 24-locus MIRU-VNTR |              | TB Cases with GENType <sup>3</sup> |        | Reporting Areas <sup>4</sup> with GENType |
|---------|---------------------|-----------------|--------------------|--------------|------------------------------------|--------|-------------------------------------------|
|         |                     |                 |                    |              | No.                                | (%)    |                                           |
| G00017  | PCR00803            | 000000000003771 | 222325173533       | 445644423328 | 115                                | (23.5) | 4                                         |
| G04701  | PCR00117            | 677777477413771 | 254326223422       | 147843263217 | 18                                 | (3.6)  | 2                                         |
| G16047  | PCR00028            | 777777777760771 | 223326153321       | 142334213423 | 16                                 | (3.3)  | 1                                         |
| G00016  | PCR00041            | 677777477413771 | 254326223432       | 14a843263217 | 14                                 | (2.9)  | 4                                         |
| G01284  | PCR00002            | 000000000003771 | 223325173533       | 44474442334A | 14                                 | (2.9)  | 3                                         |

<sup>1</sup> GENType is defined as a unique combination of spoligotype and 24-locus mycobacterial interspersed repetitive unit-variable number tandem repeat (MIRU-VNTR) type.

<sup>2</sup> PCRTyp<sup>e</sup> is defined as a unique combination of spoligotype and 12-locus MIRU-VNTR; every GENType has a corresponding PCRTyp<sup>e</sup>.

<sup>3</sup> Among culture-positive genotyped TB cases during 2010–2012 (n=650).

<sup>4</sup> The U.S. Affiliated Pacific Islands include American Samoa, Northern Mariana Islands, Federated States of Micronesia, Guam, Marshall Islands, and Palau.

**This page intentionally left blank**

# **Morbidity Tables**

## **2010**



**Table 27. Tuberculosis Cases and Percentages by Reason Tuberculosis Therapy Stopped and Type of Move: United States, 2010**

| Type of Move                      | Total Cases | Completed Therapy |        | Adverse Event |       | Lost |        | Refused |       | Died |       | Other <sup>1</sup> |        | Unknown |       |
|-----------------------------------|-------------|-------------------|--------|---------------|-------|------|--------|---------|-------|------|-------|--------------------|--------|---------|-------|
|                                   | No.         | No.               | (%)    | No.           | (%)   | No.  | (%)    | No.     | (%)   | No.  | (%)   | No.                | (%)    | No.     | (%)   |
| Moved in state <sup>2</sup>       | 331         | 265               | (80.1) | 1             | (0.3) | 14   | (4.2)  | 1       | (0.3) | 17   | (5.1) | 26                 | (7.9)  | 7       | (2.1) |
| Moved out of state <sup>3</sup>   | 305         | 228               | (74.8) | 1             | (0.3) | 23   | (7.5)  | 1       | (0.3) | 7    | (2.3) | 35                 | (11.5) | 10      | (3.3) |
| Moved out of country <sup>4</sup> | 436         | 163               | (37.4) | 0             | (0.0) | 47   | (10.8) | 7       | (1.6) | 6    | (1.4) | 199                | (45.6) | 11      | (2.5) |
| Did not move <sup>5</sup>         | 9,692       | 8,780             | (90.6) | 27            | (0.3) | 83   | (0.9)  | 56      | (0.6) | 609  | (6.3) | 27                 | (0.3)  | 108     | (1.1) |

<sup>1</sup>Therapy was discontinued for a known reason other than those listed (e.g. patient moved outside the U.S., or patient moved from state A to state B, and though state A notified state B, state B never followed up).

<sup>2</sup> Includes patients who were alive at diagnosis, started on treatment, and moved in state.

<sup>3</sup> Includes patients who were alive at diagnosis, started on treatment, and moved out of state.

<sup>4</sup> Includes patients who were alive at diagnosis, started on treatment, and moved out of the country; transnational referrals were provided for 262 (51.8%) TB patients who moved out of the country.

<sup>5</sup> Includes patients who were alive at diagnosis, started on treatment, and did not indicate having moved.

**Note:** There may be differences in the way jurisdictions determine treatment completion for patients who moved out of the country; some reporting jurisdictions may be classifying all patients who moved out of the country as 'other' for reason therapy stopped.

**Table 28. Deaths Prior to Tuberculosis Diagnosis or During Tuberculosis Therapy by Age Group: United States, 2010**

| Age Group    | Total                 |                                                      | Dead at Diagnosis       |                     |                         | Died During Therapy <sup>1</sup> |                           |                            |                   |                   |
|--------------|-----------------------|------------------------------------------------------|-------------------------|---------------------|-------------------------|----------------------------------|---------------------------|----------------------------|-------------------|-------------------|
|              | Total Deaths Reported | Deaths Related to TB Disease or Therapy <sup>2</sup> | Total Dead at Diagnosis | TB a Cause of Death | TB Not a Cause of Death | Unknown                          | Total Died During Therapy | Related to TB <sup>3</sup> | Unrelated to TB   | Unknown           |
|              | No.                   | No. (%)                                              | No.                     | No. (%)             | No. (%)                 | No. (%)                          | No.                       | No. (%)                    | No. (%)           | No. (%)           |
| <b>Total</b> | <b>893</b>            | <b>320 (35.8)</b>                                    | <b>252</b>              | <b>85 (33.7)</b>    | <b>123 (48.8)</b>       | <b>44 (17.5)</b>                 | <b>641</b>                | <b>235 (36.7)</b>          | <b>294 (45.9)</b> | <b>112 (17.5)</b> |
| 0–4          | 0                     | 0 ...                                                | 0                       | 0 ...               | 0 ...                   | 0 ...                            | 0                         | 0 ...                      | 0 ...             | 0 ...             |
| 5–14         | 2                     | 1 (50.0)                                             | 1                       | 0 (0.0)             | 1 (100.0)               | 0 (0.0)                          | 1                         | 1 (100.0)                  | 0 (0.0)           | 0 (0.0)           |
| 15–24        | 11                    | 5 (45.5)                                             | 6                       | 3 (50.0)            | 3 (50.0)                | 0 (0.0)                          | 5                         | 2 (40.0)                   | 3 (60.0)          | 0 (0.0)           |
| 25–44        | 95                    | 41 (43.2)                                            | 40                      | 16 (40.0)           | 16 (40.0)               | 8 (20.0)                         | 55                        | 25 (45.5)                  | 20 (36.4)         | 10 (18.2)         |
| 45–64        | 294                   | 114 (38.8)                                           | 84                      | 32 (38.1)           | 37 (44.0)               | 15 (17.9)                        | 210                       | 82 (39.0)                  | 99 (47.1)         | 29 (13.8)         |
| ≥65          | 491                   | 159 (32.4)                                           | 121                     | 34 (28.1)           | 66 (54.5)               | 21 (17.4)                        | 370                       | 125 (33.8)                 | 172 (46.5)        | 73 (19.7)         |

<sup>1</sup> Among patients alive at diagnosis. Excludes 16 patients who died during therapy but did not start on therapy or unknown whether or not therapy was started.

<sup>2</sup> Includes patients who were dead at diagnosis or died during therapy, for which TB or TB therapy was indicated as a cause of death.

<sup>3</sup> Eight patient deaths during therapy were related to TB therapy.

Note: Ellipses indicate data not available.

**Table 29. Sputum Culture Conversion by Age Group: United States, 2010**

| Age Group    | Total Sputum Culture Positive <sup>1</sup> | Sputum Culture Conversion |               |            |               | Sputum Culture Conversion Not Documented <sup>3</sup> |              |           |               | Reason Sputum Culture Conversion Not Documented |               |            |               |
|--------------|--------------------------------------------|---------------------------|---------------|------------|---------------|-------------------------------------------------------|--------------|-----------|---------------|-------------------------------------------------|---------------|------------|---------------|
|              |                                            | No.                       | No. (%)       | No. (%)    | No. (%)       | No.                                                   | No. (%)      | No.       | No. (%)       | No.                                             | No. (%)       | No.        | No. (%)       |
| <b>Total</b> | <b>5,787</b>                               | <b>4,960</b>              | <b>(85.7)</b> | <b>705</b> | <b>(12.2)</b> | <b>122</b>                                            | <b>(2.1)</b> | <b>71</b> | <b>(10.1)</b> | <b>168</b>                                      | <b>(23.8)</b> | <b>231</b> | <b>(32.8)</b> |
| 0-4          | 8                                          | 3                         | (37.5)        | 5          | (62.5)        | 0                                                     | (0.0)        | 0         | (0.0)         | 1                                               | (20.0)        | 0          | (0.0)         |
| 5-14         | 37                                         | 31                        | (83.8)        | 5          | (13.5)        | 1                                                     | (2.7)        | 0         | (0.0)         | 4                                               | (80.0)        | 0          | (0.0)         |
| 15-24        | 716                                        | 649                       | (90.6)        | 60         | (8.4)         | 7                                                     | (1.0)        | 10        | (16.7)        | 20                                              | (33.3)        | 3          | (5.0)         |
| 25-44        | 1945                                       | 1698                      | (87.3)        | 199        | (10.2)        | 48                                                    | (2.5)        | 29        | (14.6)        | 57                                              | (28.6)        | 21         | (10.6)        |
| 45-64        | 1885                                       | 1647                      | (87.4)        | 200        | (10.6)        | 38                                                    | (2.0)        | 17        | (8.5)         | 37                                              | (18.5)        | 80         | (40.0)        |
| 65+          | 1196                                       | 932                       | (77.9)        | 236        | (19.7)        | 28                                                    | (2.3)        | 15        | (6.4)         | 49                                              | (20.8)        | 127        | (53.8)        |

<sup>1</sup>Among persons who were alive at diagnosis and had positive sputum culture

<sup>2</sup>Among persons who had sputum culture conversion documented at any time.

<sup>3</sup>Among persons who were alive at diagnosis, had positive culture, and did not have documented culture conversion (excludes patients with unknown culture conversion).



# **Morbidity Tables Reporting Areas, 2012**



**Table 30. Tuberculosis Cases and Case Rates per 100,000 Population:  
Reporting Areas, 2012 and 2011**

| Reporting Area                           | Cases        |               | Case Rates |            | Rank According to Rate |      | Population Estimates<br>July 1, 2012 |
|------------------------------------------|--------------|---------------|------------|------------|------------------------|------|--------------------------------------|
|                                          | 2012         | 2011          | 2012       | 2011       | 2012                   | 2011 |                                      |
| <b>United States</b>                     | <b>9,945</b> | <b>10,517</b> | <b>3.2</b> | <b>3.4</b> | --                     | --   | <b>313,914,040</b>                   |
| Alabama                                  | 134          | 161           | 2.8        | 3.4        | 18                     | 13   | 4,822,023                            |
| Alaska                                   | 66           | 67            | 9          | 9.3        | 1                      | 1    | 731,449                              |
| Arizona                                  | 211          | 255           | 3.2        | 3.9        | 13                     | 8    | 6,553,255                            |
| Arkansas                                 | 70           | 85            | 2.4        | 2.9        | 24                     | 18   | 2,949,131                            |
| California                               | 2,191        | 2,322         | 5.8        | 6.2        | 3                      | 3    | 38,041,430                           |
| Colorado                                 | 64           | 70            | 1.2        | 1.4        | 43                     | 36   | 5,187,582                            |
| Connecticut                              | 74           | 83            | 2.1        | 2.3        | 29                     | 27   | 3,590,347                            |
| Delaware                                 | 28           | 21            | 3.1        | 2.3        | 14                     | 28   | 917,092                              |
| District of Columbia <sup>1</sup>        | 37           | 55            | 5.9        | 8.9        | --                     | --   | 619,020                              |
| Florida                                  | 679          | 754           | 3.5        | 4          | 9                      | 7    | 19,317,568                           |
| Georgia                                  | 357          | 347           | 3.6        | 3.5        | 8                      | 11   | 9,919,945                            |
| Hawaii                                   | 117          | 123           | 8.4        | 8.9        | 2                      | 2    | 1,392,313                            |
| Idaho                                    | 15           | 12            | 0.9        | 0.8        | 45                     | 47   | 1,595,728                            |
| Illinois                                 | 347          | 358           | 2.7        | 2.8        | 20                     | 19   | 12,875,255                           |
| Indiana                                  | 102          | 100           | 1.6        | 1.5        | 34                     | 35   | 6,537,334                            |
| Iowa                                     | 46           | 40            | 1.5        | 1.3        | 36                     | 37   | 3,074,186                            |
| Kansas                                   | 42           | 36            | 1.5        | 1.3        | 38                     | 40   | 2,885,905                            |
| Kentucky                                 | 80           | 70            | 1.8        | 1.6        | 32                     | 34   | 4,380,415                            |
| Louisiana                                | 149          | 167           | 3.2        | 3.7        | 11                     | 10   | 4,601,893                            |
| Maine                                    | 17           | 9             | 1.3        | 0.7        | 41                     | 50   | 1,329,192                            |
| Maryland                                 | 224          | 232           | 3.8        | 4          | 6                      | 6    | 5,884,563                            |
| Massachusetts                            | 215          | 195           | 3.2        | 3          | 12                     | 16   | 6,646,144                            |
| Michigan                                 | 149          | 170           | 1.5        | 1.7        | 35                     | 32   | 9,883,360                            |
| Minnesota                                | 162          | 137           | 3          | 2.6        | 15                     | 22   | 5,379,139                            |
| Mississippi                              | 81           | 91            | 2.7        | 3.1        | 19                     | 14   | 2,984,926                            |
| Missouri                                 | 89           | 98            | 1.5        | 1.6        | 37                     | 33   | 6,021,988                            |
| Montana                                  | 5            | 8             | 0.5        | 0.8        | 49                     | 46   | 1,005,141                            |
| Nebraska                                 | 22           | 23            | 1.2        | 1.2        | 44                     | 41   | 1,855,525                            |
| Nevada                                   | 82           | 96            | 3          | 3.5        | 16                     | 12   | 2,758,931                            |
| New Hampshire                            | 9            | 11            | 0.7        | 0.8        | 46                     | 45   | 1,320,718                            |
| New Jersey                               | 302          | 331           | 3.4        | 3.7        | 10                     | 9    | 8,864,590                            |
| New Mexico                               | 40           | 49            | 1.9        | 2.4        | 30                     | 26   | 2,085,538                            |
| New York                                 | 866          | 905           | 4.4        | 4.6        | 5                      | 5    | 19,570,261                           |
| North Carolina                           | 211          | 244           | 2.2        | 2.5        | 28                     | 23   | 9,752,073                            |
| North Dakota                             | 26           | 7             | 3.7        | 1          | 7                      | 44   | 699,628                              |
| Ohio                                     | 149          | 145           | 1.3        | 1.3        | 40                     | 39   | 11,544,225                           |
| Oklahoma                                 | 88           | 94            | 2.3        | 2.5        | 25                     | 24   | 3,814,820                            |
| Oregon                                   | 61           | 74            | 1.6        | 1.9        | 33                     | 30   | 3,899,353                            |
| Pennsylvania                             | 234          | 260           | 1.8        | 2          | 31                     | 29   | 12,763,536                           |
| Rhode Island                             | 23           | 27            | 2.2        | 2.6        | 27                     | 21   | 1,050,292                            |
| South Carolina                           | 122          | 140           | 2.6        | 3          | 22                     | 15   | 4,723,723                            |
| South Dakota                             | 19           | 15            | 2.3        | 1.8        | 26                     | 31   | 833,354                              |
| Tennessee                                | 164          | 156           | 2.5        | 2.4        | 23                     | 25   | 6,456,243                            |
| Texas                                    | 1,233        | 1,325         | 4.7        | 5.2        | 4                      | 4    | 26,059,203                           |
| Utah                                     | 37           | 34            | 1.3        | 1.2        | 39                     | 43   | 2,855,287                            |
| Vermont                                  | 4            | 8             | 0.6        | 1.3        | 47                     | 38   | 626,011                              |
| Virginia                                 | 235          | 221           | 2.9        | 2.7        | 17                     | 20   | 8,185,867                            |
| Washington                               | 185          | 199           | 2.7        | 2.9        | 21                     | 17   | 6,897,012                            |
| West Virginia                            | 8            | 13            | 0.4        | 0.7        | 50                     | 49   | 1,855,413                            |
| Wisconsin                                | 71           | 70            | 1.2        | 1.2        | 42                     | 42   | 5,726,398                            |
| Wyoming                                  | 3            | 4             | 0.5        | 0.7        | 48                     | 48   | 576,412                              |
| American Samoa <sup>1,2</sup>            | 1            | 3             | 1.8        | 5.5        | --                     | --   | 54,947                               |
| Fed. States of Micronesia <sup>1,2</sup> | 173          | 142           | 162.5      | 133.3      | --                     | --   | 106,487                              |
| Guam <sup>1,2</sup>                      | 68           | 79            | 42.5       | 49.4       | --                     | --   | 159,914                              |
| Marshall Islands <sup>1,2</sup>          | 145          | 148           | 211.7      | 216.1      | --                     | --   | 68,480                               |
| N. Mariana Islands <sup>1,2</sup>        | 21           | 31            | 40.9       | 60.3       | --                     | --   | 51,395                               |
| Puerto Rico <sup>1,2</sup>               | 71           | 50            | 1.9        | 1.4        | --                     | --   | 3,690,923                            |
| Republic of Palau <sup>1,2</sup>         | 2            | 8             | 9.5        | 38         | --                     | --   | 21,032                               |
| U.S. Virgin Islands <sup>1,2</sup>       | 4            | ...           | 3.8        | ...        | --                     | --   | 105,275                              |

<sup>1</sup> Not ranked with the states. See Table 31 for District of Columbia ranking among states.

<sup>2</sup> Not included in U.S. totals.

**Note:** Denominators for computing 2011 and 2012 rates for states, the District of Columbia, and Puerto Rico were obtained from Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2012 (<http://www.census.gov/popest/data/national/totals/2012/index.html>) (accessed August 12, 2013); for all other areas, from IDB Summary Demographic Data (<http://www.census.gov/population/international/data/idb/informationGateway.php>) (accessed August 12, 2013).

Ellipses indicate data not available.

See Technical Notes.

See Surveillance Slide #4.

**Table 31. Tuberculosis Cases and Case Rates per 100,000 Population, Ranked and Grouped by Number of Cases: United States and the District of Columbia, 2012 and 2011**

| Reporting Area                 | 2012         |            | 2011          |            | 2011–2012 % Change |             | Overall Rank by 2012 Rate |
|--------------------------------|--------------|------------|---------------|------------|--------------------|-------------|---------------------------|
|                                | No.          | Rate       | No.           | Rate       | No.                | Rate        |                           |
| <b>Total</b>                   | <b>9,945</b> | <b>3.2</b> | <b>10,517</b> | <b>3.4</b> | <b>-5.4</b>        | <b>-6.1</b> | ...                       |
| <b>&gt;= 500 cases in 2012</b> |              |            |               |            |                    |             |                           |
| California                     | 2,191        | 5.8        | 2,322         | 6.2        | -5.6               | -6.5        | 3                         |
| Texas                          | 1,233        | 4.7        | 1,325         | 5.2        | -6.9               | -8.5        | 4                         |
| New York <sup>1</sup>          | 866          | 4.4        | 905           | 4.6        | -4.3               | -4.6        | 5                         |
| Florida                        | 679          | 3.5        | 754           | 4.0        | -9.9               | -11.0       | 9                         |
| <b>100 - 499 cases in 2012</b> |              |            |               |            |                    |             |                           |
| Georgia                        | 357          | 3.6        | 347           | 3.5        | 2.9                | 1.8         | 8                         |
| Illinois                       | 347          | 2.7        | 358           | 2.8        | -3.1               | -3.2        | 20                        |
| New Jersey                     | 302          | 3.4        | 331           | 3.7        | -8.8               | -9.1        | 10                        |
| Virginia                       | 235          | 2.9        | 221           | 2.7        | 6.3                | 5.3         | 17                        |
| Pennsylvania                   | 234          | 1.8        | 260           | 2.0        | -10.0              | -10.1       | 31                        |
| Maryland                       | 224          | 3.8        | 232           | 4.0        | -3.4               | -4.2        | 6                         |
| Massachusetts                  | 215          | 3.2        | 195           | 3.0        | 10.3               | 9.6         | 12                        |
| Arizona                        | 211          | 3.2        | 255           | 3.9        | -17.3              | -18.3       | 13                        |
| North Carolina                 | 211          | 2.2        | 244           | 2.5        | -13.5              | -14.4       | 28                        |
| Washington                     | 185          | 2.7        | 199           | 2.9        | -7.0               | -8.0        | 21                        |
| Tennessee                      | 164          | 2.5        | 156           | 2.4        | 5.1                | 4.2         | 23                        |
| Minnesota                      | 162          | 3.0        | 137           | 2.6        | 18.2               | 17.5        | 15                        |
| Louisiana                      | 149          | 3.2        | 167           | 3.7        | -10.8              | -11.3       | 11                        |
| Michigan                       | 149          | 1.5        | 170           | 1.7        | -12.4              | -12.4       | 35                        |
| Ohio                           | 149          | 1.3        | 145           | 1.3        | 2.8                | 2.7         | 40                        |
| Alabama                        | 134          | 2.8        | 161           | 3.4        | -16.8              | -17.1       | 18                        |
| South Carolina                 | 122          | 2.6        | 140           | 3.0        | -12.9              | -13.8       | 22                        |
| Hawaii                         | 117          | 8.4        | 123           | 8.9        | -4.9               | -5.8        | 2                         |
| Indiana                        | 102          | 1.6        | 100           | 1.5        | 2.0                | 1.7         | 34                        |
| <b>&lt; 100 cases in 2012</b>  |              |            |               |            |                    |             |                           |
| Missouri                       | 89           | 1.5        | 98            | 1.6        | -9.2               | -9.4        | 37                        |
| Oklahoma                       | 88           | 2.3        | 94            | 2.5        | -6.4               | -7.1        | 25                        |
| Nevada                         | 82           | 3.0        | 96            | 3.5        | -14.6              | -15.8       | 16                        |
| Mississippi                    | 81           | 2.7        | 91            | 3.1        | -11.0              | -11.2       | 19                        |
| Kentucky                       | 80           | 1.8        | 70            | 1.6        | 14.3               | 13.9        | 32                        |
| Connecticut                    | 74           | 2.1        | 83            | 2.3        | -10.8              | -10.9       | 29                        |
| Wisconsin                      | 71           | 1.2        | 70            | 1.2        | 1.4                | 1.1         | 42                        |
| Arkansas                       | 70           | 2.4        | 85            | 2.9        | -17.6              | -17.9       | 24                        |
| Alaska                         | 66           | 9.0        | 67            | 9.3        | -1.5               | -2.5        | 1                         |
| Colorado                       | 64           | 1.2        | 70            | 1.4        | -8.6               | -9.8        | 43                        |
| Oregon                         | 61           | 1.6        | 74            | 1.9        | -17.6              | -18.2       | 33                        |
| Iowa                           | 46           | 1.5        | 40            | 1.3        | 15.0               | 14.6        | 36                        |
| Kansas                         | 42           | 1.5        | 36            | 1.3        | 16.7               | 16.0        | 38                        |
| New Mexico                     | 40           | 1.9        | 49            | 2.4        | -18.4              | -18.6       | 30                        |
| District of Columbia           | 37           | 6.0        | 55            | 8.9        | -32.7              | -32.7       | --                        |
| Utah                           | 37           | 1.3        | 34            | 1.2        | 8.8                | 7.3         | 39                        |
| Delaware                       | 28           | 3.1        | 21            | 2.3        | 33.3               | 32.0        | 14                        |
| North Dakota                   | 26           | 3.7        | 7             | 1.0        | 271.4              | 263.5       | 7                         |
| Rhode Island                   | 23           | 2.2        | 27            | 2.6        | -14.8              | -14.8       | 27                        |
| Nebraska                       | 22           | 1.2        | 23            | 1.2        | -4.3               | -5.0        | 44                        |
| South Dakota                   | 19           | 2.3        | 15            | 1.8        | 26.7               | 25.2        | 26                        |
| Maine                          | 17           | 1.3        | 9             | 0.7        | 88.9               | 88.8        | 41                        |
| Idaho                          | 15           | 0.9        | 12            | 0.8        | 25.0               | 24.1        | 45                        |
| New Hampshire                  | 9            | 0.7        | 11            | 0.8        | -18.2              | -18.4       | 46                        |
| West Virginia                  | 8            | 0.4        | 13            | 0.7        | -38.5              | -38.5       | 50                        |
| Montana                        | 5            | 0.5        | 8             | 0.8        | -37.5              | -38.0       | 49                        |
| Vermont                        | 4            | 0.6        | 8             | 1.3        | -50.0              | -50.0       | 47                        |
| Wyoming                        | 3            | 0.5        | 4             | 0.7        | -25.0              | -26.2       | 48                        |

<sup>1</sup> Includes New York City.

**Note:** Denominators for computing 2011 and 2012 rates for states, the District of Columbia, and Puerto Rico were obtained from Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2012 (<http://www.census.gov/popest/data/national/totals/2012/index.html>) (accessed August 12, 2013).

See Table 30 for ranking of states without the District of Columbia.

**This page intentionally left blank**

**Table 32. Tuberculosis Cases and Percentages by Age Group: Reporting Areas, 2012**

| Reporting Area       | Total Cases  | Under 5    |              | 5–14       |              | 15–24        |               | 25–44        |               | 45–64        |               | ≥65          |               | Unknown or Missing |              |
|----------------------|--------------|------------|--------------|------------|--------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------------|--------------|
|                      |              | No.        | (%)          | No.        | (%)          | No.          | (%)           | No.          | (%)           | No.          | (%)           | No.          | (%)           | No.                | (%)          |
| <b>United States</b> | <b>9,945</b> | <b>260</b> | <b>(2.6)</b> | <b>226</b> | <b>(2.3)</b> | <b>1,020</b> | <b>(10.3)</b> | <b>3,118</b> | <b>(31.4)</b> | <b>3,114</b> | <b>(31.3)</b> | <b>2,204</b> | <b>(22.2)</b> | <b>3</b>           | <b>(0.0)</b> |
| Alabama              | 134          | 4          | (3.0)        | 0          | (0.0)        | 14           | (10.4)        | 33           | (24.6)        | 38           | (28.4)        | 45           | (33.6)        | 0                  | (0.0)        |
| Alaska               | 66           | 2          | (3.0)        | 7          | (10.6)       | 10           | (15.2)        | 17           | (25.8)        | 24           | (36.4)        | 6            | (9.1)         | 0                  | (0.0)        |
| Arizona              | 211          | 3          | (1.4)        | 7          | (3.3)        | 31           | (14.7)        | 84           | (39.8)        | 49           | (23.2)        | 37           | (17.5)        | 0                  | (0.0)        |
| Arkansas             | 70           | 1          | (1.4)        | 2          | (2.9)        | 4            | (5.7)         | 20           | (28.6)        | 22           | (31.4)        | 21           | (30.0)        | 0                  | (0.0)        |
| California           | 2,191        | 48         | (2.2)        | 40         | (1.8)        | 215          | (9.8)         | 597          | (27.2)        | 700          | (31.9)        | 590          | (26.9)        | 1                  | (0.0)        |
| Colorado             | 64           | 0          | (0.0)        | 3          | (4.7)        | 11           | (17.2)        | 13           | (20.3)        | 17           | (26.6)        | 20           | (31.3)        | 0                  | (0.0)        |
| Connecticut          | 74           | 1          | (1.4)        | 0          | (0.0)        | 7            | (9.5)         | 40           | (54.1)        | 9            | (12.2)        | 17           | (23.0)        | 0                  | (0.0)        |
| Delaware             | 28           | 0          | (0.0)        | 0          | (0.0)        | 3            | (10.7)        | 10           | (35.7)        | 7            | (25.0)        | 8            | (28.6)        | 0                  | (0.0)        |
| District of Columbia | 37           | 1          | (2.7)        | 1          | (2.7)        | 4            | (10.8)        | 15           | (40.5)        | 11           | (29.7)        | 5            | (13.5)        | 0                  | (0.0)        |
| Florida              | 679          | 13         | (1.9)        | 17         | (2.5)        | 60           | (8.8)         | 201          | (29.6)        | 256          | (37.7)        | 132          | (19.4)        | 0                  | (0.0)        |
| Georgia              | 357          | 11         | (3.1)        | 12         | (3.4)        | 39           | (10.9)        | 118          | (33.1)        | 127          | (35.6)        | 50           | (14.0)        | 0                  | (0.0)        |
| Hawaii               | 117          | 1          | (0.9)        | 3          | (2.6)        | 14           | (12.0)        | 21           | (17.9)        | 40           | (34.2)        | 38           | (32.5)        | 0                  | (0.0)        |
| Idaho                | 15           | 1          | (6.7)        | 0          | (0.0)        | 5            | (33.3)        | 4            | (26.7)        | 2            | (13.3)        | 3            | (20.0)        | 0                  | (0.0)        |
| Illinois             | 347          | 9          | (2.6)        | 7          | (2.0)        | 29           | (8.4)         | 105          | (30.3)        | 122          | (35.2)        | 75           | (21.6)        | 0                  | (0.0)        |
| Indiana              | 102          | 6          | (5.9)        | 4          | (3.9)        | 6            | (5.9)         | 40           | (39.2)        | 23           | (22.5)        | 23           | (22.5)        | 0                  | (0.0)        |
| Iowa                 | 46           | 1          | (2.2)        | 1          | (2.2)        | 7            | (15.2)        | 22           | (47.8)        | 11           | (23.9)        | 4            | (8.7)         | 0                  | (0.0)        |
| Kansas               | 42           | 1          | (2.4)        | 1          | (2.4)        | 8            | (19.0)        | 11           | (26.2)        | 13           | (31.0)        | 8            | (19.0)        | 0                  | (0.0)        |
| Kentucky             | 80           | 2          | (2.5)        | 1          | (1.3)        | 6            | (7.5)         | 27           | (33.8)        | 24           | (30.0)        | 20           | (25.0)        | 0                  | (0.0)        |
| Louisiana            | 149          | 3          | (2.0)        | 1          | (0.7)        | 14           | (9.4)         | 48           | (32.2)        | 52           | (34.9)        | 31           | (20.8)        | 0                  | (0.0)        |
| Maine                | 17           | 1          | (5.9)        | 1          | (5.9)        | 1            | (5.9)         | 5            | (29.4)        | 6            | (35.3)        | 3            | (17.6)        | 0                  | (0.0)        |
| Maryland             | 224          | 9          | (4.0)        | 5          | (2.2)        | 23           | (10.3)        | 88           | (39.3)        | 56           | (25.0)        | 43           | (19.2)        | 0                  | (0.0)        |
| Massachusetts        | 215          | 1          | (0.5)        | 1          | (0.5)        | 26           | (12.1)        | 81           | (37.7)        | 58           | (27.0)        | 48           | (22.3)        | 0                  | (0.0)        |
| Michigan             | 149          | 3          | (2.0)        | 0          | (0.0)        | 17           | (11.4)        | 36           | (24.2)        | 46           | (30.9)        | 47           | (31.5)        | 0                  | (0.0)        |
| Minnesota            | 162          | 7          | (4.3)        | 16         | (9.9)        | 32           | (19.8)        | 60           | (37.0)        | 27           | (16.7)        | 20           | (12.3)        | 0                  | (0.0)        |
| Mississippi          | 81           | 0          | (0.0)        | 1          | (1.2)        | 4            | (4.9)         | 20           | (24.7)        | 36           | (44.4)        | 20           | (24.7)        | 0                  | (0.0)        |
| Missouri             | 89           | 3          | (3.4)        | 1          | (1.1)        | 7            | (7.9)         | 25           | (28.1)        | 25           | (28.1)        | 28           | (31.5)        | 0                  | (0.0)        |
| Montana              | 5            | 0          | (0.0)        | 0          | (0.0)        | 0            | (0.0)         | 0            | (0.0)         | 3            | (60.0)        | 2            | (40.0)        | 0                  | (0.0)        |
| Nebraska             | 22           | 1          | (4.5)        | 0          | (0.0)        | 3            | (13.6)        | 13           | (59.1)        | 4            | (18.2)        | 1            | (4.5)         | 0                  | (0.0)        |
| Nevada               | 82           | 5          | (6.1)        | 5          | (6.1)        | 12           | (14.6)        | 14           | (17.1)        | 25           | (30.5)        | 21           | (25.6)        | 0                  | (0.0)        |
| New Hampshire        | 9            | 0          | (0.0)        | 1          | (11.1)       | 0            | (0.0)         | 6            | (66.7)        | 0            | (0.0)         | 2            | (22.2)        | 0                  | (0.0)        |
| New Jersey           | 302          | 1          | (0.3)        | 4          | (1.3)        | 24           | (7.9)         | 123          | (40.7)        | 86           | (28.5)        | 64           | (21.2)        | 0                  | (0.0)        |

**Table 32. (Cont'd) Tuberculosis Cases and Percentages by Age Group: Reporting Areas, 2012**

| Reporting Area                         | Total Cases | Under 5 |        | 5–14 |        | 15–24 |        | 25–44 |        | 45–64 |         | ≥65 |        | Unknown or Missing<br>(%) |        |
|----------------------------------------|-------------|---------|--------|------|--------|-------|--------|-------|--------|-------|---------|-----|--------|---------------------------|--------|
|                                        |             | No.     | (%)    | No.  | (%)    | No.   | (%)    | No.   | (%)    | No.   | (%)     | No. | (%)    |                           |        |
| New Mexico                             | 40          | 0       | (0.0)  | 0    | (0.0)  | 1     | (2.5)  | 12    | (30.0) | 10    | (25.0)  | 17  | (42.5) | 0                         | (0.0)  |
| New York                               | 866         | 9       | (1.0)  | 18   | (2.1)  | 78    | (9.0)  | 298   | (34.4) | 274   | (31.6)  | 189 | (21.8) | 0                         | (0.0)  |
| North Carolina                         | 211         | 11      | (5.2)  | 4    | (1.9)  | 25    | (11.8) | 72    | (34.1) | 54    | (25.6)  | 45  | (21.3) | 0                         | (0.0)  |
| North Dakota                           | 26          | 4       | (15.4) | 2    | (7.7)  | 6     | (23.1) | 6     | (23.1) | 6     | (23.1)  | 2   | (7.7)  | 0                         | (0.0)  |
| Ohio                                   | 149         | 3       | (2.0)  | 4    | (2.7)  | 19    | (12.8) | 49    | (32.9) | 37    | (24.8)  | 37  | (24.8) | 0                         | (0.0)  |
| Oklahoma                               | 88          | 7       | (8.0)  | 5    | (5.7)  | 7     | (8.0)  | 25    | (28.4) | 28    | (31.8)  | 16  | (18.2) | 0                         | (0.0)  |
| Oregon                                 | 61          | 0       | (0.0)  | 1    | (1.6)  | 5     | (8.2)  | 20    | (32.8) | 24    | (39.3)  | 11  | (18.0) | 0                         | (0.0)  |
| Pennsylvania                           | 234         | 3       | (1.3)  | 4    | (1.7)  | 16    | (6.8)  | 70    | (29.9) | 79    | (33.8)  | 62  | (26.5) | 0                         | (0.0)  |
| Rhode Island                           | 23          | 2       | (8.7)  | 0    | (0.0)  | 4     | (17.4) | 5     | (21.7) | 4     | (17.4)  | 8   | (34.8) | 0                         | (0.0)  |
| South Carolina                         | 122         | 4       | (3.3)  | 3    | (2.5)  | 7     | (5.7)  | 28    | (23.0) | 46    | (37.7)  | 34  | (27.9) | 0                         | (0.0)  |
| South Dakota                           | 19          | 2       | (10.5) | 0    | (0.0)  | 1     | (5.3)  | 5     | (26.3) | 7     | (36.8)  | 4   | (21.1) | 0                         | (0.0)  |
| Tennessee                              | 164         | 5       | (3.0)  | 5    | (3.0)  | 15    | (9.1)  | 51    | (31.1) | 59    | (36.0)  | 29  | (17.7) | 0                         | (0.0)  |
| Texas                                  | 1,233       | 50      | (4.1)  | 28   | (2.3)  | 155   | (12.6) | 373   | (30.3) | 428   | (34.7)  | 199 | (16.1) | 0                         | (0.0)  |
| Utah                                   | 37          | 1       | (2.7)  | 0    | (0.0)  | 2     | (5.4)  | 15    | (40.5) | 11    | (29.7)  | 8   | (21.6) | 0                         | (0.0)  |
| Vermont                                | 4           | 0       | (0.0)  | 0    | (0.0)  | 1     | (25.0) | 0     | (0.0)  | 3     | (75.0)  | 0   | (0.0)  | 0                         | (0.0)  |
| Virginia                               | 235         | 8       | (3.4)  | 5    | (2.1)  | 20    | (8.5)  | 88    | (37.4) | 68    | (28.9)  | 46  | (19.6) | 0                         | (0.0)  |
| Washington                             | 185         | 6       | (3.2)  | 4    | (2.2)  | 14    | (7.6)  | 71    | (38.4) | 42    | (22.7)  | 48  | (25.9) | 0                         | (0.0)  |
| West Virginia                          | 8           | 0       | (0.0)  | 0    | (0.0)  | 1     | (12.5) | 5     | (62.5) | 1     | (12.5)  | 1   | (12.5) | 0                         | (0.0)  |
| Wisconsin                              | 71          | 6       | (8.5)  | 1    | (1.4)  | 7     | (9.9)  | 26    | (36.6) | 14    | (19.7)  | 15  | (21.1) | 2                         | (2.8)  |
| Wyoming                                | 3           | 0       | (0.0)  | 0    | (0.0)  | 0     | (0.0)  | 2     | (66.7) | 0     | (0.0)   | 1   | (33.3) | 0                         | (0.0)  |
| American Samoa <sup>1</sup>            | 1           | 0       | (0.0)  | 0    | (0.0)  | 0     | (0.0)  | 0     | (0.0)  | 1     | (100.0) | 0   | (0.0)  | 0                         | (0.0)  |
| Fed. States of Micronesia <sup>1</sup> | 173         | 20      | (11.6) | 28   | (16.2) | 33    | (19.1) | 52    | (30.1) | 31    | (17.9)  | 8   | (4.6)  | 1                         | (0.6)  |
| Guam <sup>1</sup>                      | 68          | 6       | (8.8)  | 9    | (13.2) | 5     | (7.4)  | 12    | (17.6) | 22    | (32.4)  | 14  | (20.6) | 0                         | (0.0)  |
| Marshall Islands <sup>1</sup>          | 145         | 22      | (15.2) | 17   | (11.7) | 28    | (19.3) | 39    | (26.9) | 31    | (21.4)  | 8   | (5.5)  | 0                         | (0.0)  |
| N. Mariana Islands <sup>1</sup>        | 21          | 0       | (0.0)  | 0    | (0.0)  | 1     | (4.8)  | 11    | (52.4) | 8     | (38.1)  | 1   | (4.8)  | 0                         | (0.0)  |
| Puerto Rico <sup>1</sup>               | 71          | 1       | (1.4)  | 0    | (0.0)  | 2     | (2.8)  | 18    | (25.4) | 27    | (38.0)  | 23  | (32.4) | 0                         | (0.0)  |
| Republic of Palau <sup>1</sup>         | 4           | 0       | (0.0)  | 0    | (0.0)  | 1     | (25.0) | 2     | (50.0) | 1     | (25.0)  | 0   | (0.0)  | 0                         | (0.0)  |
| U.S. Virgin Islands <sup>1</sup>       | 4           | 0       | (0.0)  | 0    | (0.0)  | 2     | (50.0) | 0     | (0.0)  | 0     | (0.0)   | 2   | (50.0) | 2                         | (50.0) |

<sup>1</sup>Not included in U.S. totals.

**Table 33. Tuberculosis Cases and Percentages by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2012**

| Reporting Area       | Total Cases  | Hispanic or Latino <sup>1</sup> |               | American Indian or Alaska Native |              | Asian        |               | Black or African American |               | Native Hawaiian or Other Pacific Islander |              | White        |               | Multiple Race <sup>2</sup> |              | Unknown or Missing |              |
|----------------------|--------------|---------------------------------|---------------|----------------------------------|--------------|--------------|---------------|---------------------------|---------------|-------------------------------------------|--------------|--------------|---------------|----------------------------|--------------|--------------------|--------------|
|                      |              | No.                             | (%)           | No.                              | (%)          | No.          | (%)           | No.                       | (%)           | No.                                       | (%)          | No.          | (%)           | No.                        | (%)          |                    |              |
| <b>United States</b> | <b>9,945</b> | <b>2,790</b>                    | <b>(28.1)</b> | <b>146</b>                       | <b>(1.5)</b> | <b>2,957</b> | <b>(29.7)</b> | <b>2,234</b>              | <b>(22.5)</b> | <b>64</b>                                 | <b>(0.6)</b> | <b>1,572</b> | <b>(15.8)</b> | <b>148</b>                 | <b>(1.5)</b> | <b>34</b>          | <b>(0.3)</b> |
| Alabama              | 134          | 21                              | (15.7)        | 0                                | (0.0)        | 3            | (2.2)         | 67                        | (50.0)        | 0                                         | (0.0)        | 43           | (32.1)        | 0                          | (0.0)        | 0                  | (0.0)        |
| Alaska               | 66           | 4                               | (6.1)         | 50                               | (75.8)       | 8            | (12.1)        | 1                         | (1.5)         | 0                                         | (0.0)        | 2            | (3.0)         | 0                          | (0.0)        | 1                  | (1.5)        |
| Arizona              | 211          | 123                             | (58.3)        | 15                               | (7.1)        | 30           | (14.2)        | 24                        | (11.4)        | 0                                         | (0.0)        | 19           | (9.0)         | 0                          | (0.0)        | 0                  | (0.0)        |
| Arkansas             | 70           | 10                              | (14.3)        | 0                                | (0.0)        | 11           | (15.7)        | 10                        | (14.3)        | 4                                         | (5.7)        | 35           | (50.0)        | 0                          | (0.0)        | 0                  | (0.0)        |
| California           | 2,191        | 816                             | (37.2)        | 6                                | (0.3)        | 959          | (43.8)        | 137                       | (6.3)         | 14                                        | (0.6)        | 183          | (8.4)         | 76                         | (3.5)        | 0                  | (0.0)        |
| Colorado             | 64           | 29                              | (45.3)        | 2                                | (3.1)        | 18           | (28.1)        | 9                         | (14.1)        | 0                                         | (0.0)        | 4            | (6.3)         | 2                          | (3.1)        | 0                  | (0.0)        |
| Connecticut          | 74           | 18                              | (24.3)        | 0                                | (0.0)        | 28           | (37.8)        | 16                        | (21.6)        | 0                                         | (0.0)        | 9            | (12.2)        | 3                          | (4.1)        | 0                  | (0.0)        |
| Delaware             | 28           | 6                               | (21.4)        | 0                                | (0.0)        | 6            | (21.4)        | 11                        | (39.3)        | 0                                         | (0.0)        | 4            | (14.3)        | 1                          | (3.6)        | 0                  | (0.0)        |
| District of Columbia | 37           | 4                               | (10.8)        | 0                                | (0.0)        | 2            | (5.4)         | 31                        | (83.8)        | 0                                         | (0.0)        | 0            | (0.0)         | 0                          | (0.0)        | 0                  | (0.0)        |
| Florida              | 679          | 173                             | (25.5)        | 0                                | (0.0)        | 70           | (10.3)        | 245                       | (36.1)        | 1                                         | (0.1)        | 189          | (27.8)        | 1                          | (0.1)        | 0                  | (0.0)        |
| Georgia              | 357          | 55                              | (15.4)        | 0                                | (0.0)        | 67           | (18.8)        | 183                       | (51.3)        | 0                                         | (0.0)        | 51           | (14.3)        | 0                          | (0.0)        | 1                  | (0.3)        |
| Hawaii               | 117          | 2                               | (1.7)         | 0                                | (0.0)        | 90           | (76.9)        | 0                         | (0.0)         | 17                                        | (14.5)       | 5            | (4.3)         | 3                          | (2.6)        | 0                  | (0.0)        |
| Idaho                | 15           | 7                               | (46.7)        | 0                                | (0.0)        | 1            | (6.7)         | 4                         | (26.7)        | 0                                         | (0.0)        | 2            | (13.3)        | 1                          | (6.7)        | 0                  | (0.0)        |
| Illinois             | 347          | 88                              | (25.4)        | 0                                | (0.0)        | 116          | (33.4)        | 82                        | (23.6)        | 3                                         | (0.9)        | 58           | (16.7)        | 0                          | (0.0)        | 0                  | (0.0)        |
| Indiana              | 102          | 10                              | (9.8)         | 0                                | (0.0)        | 26           | (25.5)        | 29                        | (28.4)        | 0                                         | (0.0)        | 37           | (36.3)        | 0                          | (0.0)        | 0                  | (0.0)        |
| Iowa                 | 46           | 8                               | (17.4)        | 0                                | (0.0)        | 18           | (39.1)        | 8                         | (17.4)        | 1                                         | (2.2)        | 11           | (23.9)        | 0                          | (0.0)        | 0                  | (0.0)        |
| Kansas               | 42           | 12                              | (28.6)        | 0                                | (0.0)        | 14           | (33.3)        | 6                         | (14.3)        | 1                                         | (2.4)        | 9            | (21.4)        | 0                          | (0.0)        | 0                  | (0.0)        |
| Kentucky             | 80           | 5                               | (6.3)         | 0                                | (0.0)        | 15           | (18.8)        | 14                        | (17.5)        | 0                                         | (0.0)        | 45           | (56.3)        | 1                          | (1.3)        | 0                  | (0.0)        |
| Louisiana            | 149          | 13                              | (8.7)         | 0                                | (0.0)        | 19           | (12.8)        | 70                        | (47.0)        | 0                                         | (0.0)        | 47           | (31.5)        | 0                          | (0.0)        | 0                  | (0.0)        |
| Maine                | 17           | 1                               | (5.9)         | 0                                | (0.0)        | 2            | (11.8)        | 6                         | (35.3)        | 1                                         | (5.9)        | 7            | (41.2)        | 0                          | (0.0)        | 0                  | (0.0)        |
| Maryland             | 224          | 33                              | (14.7)        | 0                                | (0.0)        | 73           | (32.6)        | 99                        | (44.2)        | 0                                         | (0.0)        | 18           | (8.0)         | 1                          | (0.4)        | 0                  | (0.0)        |
| Massachusetts        | 215          | 31                              | (14.4)        | 0                                | (0.0)        | 79           | (36.7)        | 62                        | (28.8)        | 0                                         | (0.0)        | 41           | (19.1)        | 2                          | (0.9)        | 0                  | (0.0)        |
| Michigan             | 149          | 20                              | (13.4)        | 0                                | (0.0)        | 45           | (30.2)        | 41                        | (27.5)        | 0                                         | (0.0)        | 34           | (22.8)        | 0                          | (0.0)        | 9                  | (6.0)        |
| Minnesota            | 162          | 16                              | (9.9)         | 2                                | (1.2)        | 42           | (25.9)        | 90                        | (55.6)        | 0                                         | (0.0)        | 12           | (7.4)         | 0                          | (0.0)        | 0                  | (0.0)        |
| Mississippi          | 81           | 7                               | (8.6)         | 0                                | (0.0)        | 4            | (4.9)         | 49                        | (60.5)        | 0                                         | (0.0)        | 21           | (25.9)        | 0                          | (0.0)        | 0                  | (0.0)        |
| Missouri             | 89           | 8                               | (9.0)         | 0                                | (0.0)        | 19           | (21.3)        | 28                        | (31.5)        | 0                                         | (0.0)        | 32           | (36.0)        | 0                          | (0.0)        | 2                  | (2.2)        |
| Montana              | 5            | 0                               | (0.0)         | 5                                | (100.0)      | 0            | (0.0)         | 0                         | (0.0)         | 0                                         | (0.0)        | 0            | (0.0)         | 0                          | (0.0)        | 0                  | (0.0)        |
| Nebraska             | 22           | 6                               | (27.3)        | 0                                | (0.0)        | 4            | (18.2)        | 7                         | (31.8)        | 0                                         | (0.0)        | 3            | (13.6)        | 2                          | (9.1)        | 0                  | (0.0)        |
| Nevada               | 82           | 22                              | (26.8)        | 2                                | (2.4)        | 39           | (47.6)        | 5                         | (6.1)         | 0                                         | (0.0)        | 14           | (17.1)        | 0                          | (0.0)        | 0                  | (0.0)        |
| New Hampshire        | 9            | 2                               | (22.2)        | 0                                | (0.0)        | 5            | (55.6)        | 2                         | (22.2)        | 0                                         | (0.0)        | 0            | (0.0)         | 0                          | (0.0)        | 0                  | (0.0)        |
| New Jersey           | 302          | 79                              | (26.2)        | 0                                | (0.0)        | 146          | (48.3)        | 47                        | (15.6)        | 0                                         | (0.0)        | 30           | (9.9)         | 0                          | (0.0)        | 0                  | (0.0)        |

**Table 33. (Cont'd) Tuberculosis Cases and Percentages by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2012**

| Reporting Area                         | Total Cases | Hispanic or Latino <sup>1</sup> | American Indian or Alaska Native | Asian      | Black or African American | Native Hawaiian or Other Pacific Islander | White      | Multiple Race <sup>2</sup> | Unknown or Missing |         |
|----------------------------------------|-------------|---------------------------------|----------------------------------|------------|---------------------------|-------------------------------------------|------------|----------------------------|--------------------|---------|
|                                        | No.         | (%)                             | No.                              | (%)        | No.                       | (%)                                       | No.        | (%)                        | No.                | (%)     |
| New Mexico                             | 40          | 24 (60.0)                       | 12 (30.0)                        | 2 (5.0)    | 0 (0.0)                   | 0 (0.0)                                   | 2 (5.0)    | 0 (0.0)                    | 0 (0.0)            | 0 (0.0) |
| New York                               | 866         | 231 (26.7)                      | 0 (0.0)                          | 316 (36.5) | 172 (19.9)                | 1 (0.1)                                   | 95 (11.0)  | 37 (4.3)                   | 14 (1.6)           | 0 (0.0) |
| North Carolina                         | 211         | 42 (19.9)                       | 5 (2.4)                          | 48 (22.7)  | 66 (31.3)                 | 0 (0.0)                                   | 41 (19.4)  | 9 (4.3)                    | 0 (0.0)            | 0 (0.0) |
| North Dakota                           | 26          | 0 (0.0)                         | 15 (57.7)                        | 2 (7.7)    | 2 (7.7)                   | 0 (0.0)                                   | 7 (26.9)   | 0 (0.0)                    | 0 (0.0)            | 0 (0.0) |
| Ohio                                   | 149         | 15 (10.1)                       | 0 (0.0)                          | 28 (18.8)  | 63 (42.3)                 | 0 (0.0)                                   | 42 (28.2)  | 1 (0.7)                    | 0 (0.0)            | 0 (0.0) |
| Oklahoma                               | 88          | 13 (14.8)                       | 13 (14.8)                        | 18 (20.5)  | 15 (17.0)                 | 4 (4.5)                                   | 22 (25.0)  | 2 (2.3)                    | 1 (1.1)            | 0 (0.0) |
| Oregon                                 | 61          | 22 (36.1)                       | 2 (3.3)                          | 23 (37.7)  | 2 (3.3)                   | 1 (1.6)                                   | 11 (18.0)  | 0 (0.0)                    | 0 (0.0)            | 0 (0.0) |
| Pennsylvania                           | 234         | 25 (10.7)                       | 0 (0.0)                          | 86 (36.8)  | 66 (28.2)                 | 0 (0.0)                                   | 53 (22.6)  | 4 (1.7)                    | 0 (0.0)            | 0 (0.0) |
| Rhode Island                           | 23          | 9 (39.1)                        | 0 (0.0)                          | 6 (26.1)   | 4 (17.4)                  | 0 (0.0)                                   | 4 (17.4)   | 0 (0.0)                    | 0 (0.0)            | 0 (0.0) |
| South Carolina                         | 122         | 11 (9.0)                        | 0 (0.0)                          | 16 (13.1)  | 63 (51.6)                 | 0 (0.0)                                   | 32 (26.2)  | 0 (0.0)                    | 0 (0.0)            | 0 (0.0) |
| South Dakota                           | 19          | 0 (0.0)                         | 8 (42.1)                         | 2 (10.5)   | 3 (15.8)                  | 0 (0.0)                                   | 6 (31.6)   | 0 (0.0)                    | 0 (0.0)            | 0 (0.0) |
| Tennessee                              | 164         | 17 (10.4)                       | 0 (0.0)                          | 21 (12.8)  | 68 (41.5)                 | 2 (1.2)                                   | 56 (34.1)  | 0 (0.0)                    | 0 (0.0)            | 0 (0.0) |
| Texas                                  | 1,233       | 638 (51.7)                      | 0 (0.0)                          | 204 (16.5) | 224 (18.2)                | 5 (0.4)                                   | 162 (13.1) | 0 (0.0)                    | 0 (0.0)            | 0 (0.0) |
| Utah                                   | 37          | 11 (29.7)                       | 4 (10.8)                         | 11 (29.7)  | 3 (8.1)                   | 2 (5.4)                                   | 6 (16.2)   | 0 (0.0)                    | 0 (0.0)            | 0 (0.0) |
| Vermont                                | 4           | 0 (0.0)                         | 0 (0.0)                          | 2 (50.0)   | 2 (50.0)                  | 0 (0.0)                                   | 0 (0.0)    | 0 (0.0)                    | 0 (0.0)            | 0 (0.0) |
| Virginia                               | 235         | 52 (22.1)                       | 1 (0.4)                          | 97 (41.3)  | 50 (21.3)                 | 0 (0.0)                                   | 35 (14.9)  | 0 (0.0)                    | 0 (0.0)            | 0 (0.0) |
| Washington                             | 185         | 31 (16.8)                       | 3 (1.6)                          | 82 (44.3)  | 36 (19.5)                 | 7 (3.8)                                   | 22 (11.9)  | 2 (1.1)                    | 2 (1.1)            | 0 (0.0) |
| West Virginia                          | 8           | 1 (12.5)                        | 0 (0.0)                          | 2 (25.0)   | 1 (12.5)                  | 0 (0.0)                                   | 4 (50.0)   | 0 (0.0)                    | 0 (0.0)            | 0 (0.0) |
| Wisconsin                              | 71          | 18 (25.4)                       | 1 (1.4)                          | 32 (45.1)  | 10 (14.1)                 | 0 (0.0)                                   | 6 (8.5)    | 0 (0.0)                    | 4 (5.6)            | 0 (0.0) |
| Wyoming                                | 3           | 1 (33.3)                        | 0 (0.0)                          | 0 (0.0)    | 1 (33.3)                  | 0 (0.0)                                   | 1 (33.3)   | 0 (0.0)                    | 0 (0.0)            | 0 (0.0) |
| American Samoa <sup>3</sup>            | 1           | 0 (0.0)                         | 0 (0.0)                          | 0 (0.0)    | 0 (0.0)                   | 1 (100.0)                                 | 0 (0.0)    | 0 (0.0)                    | 0 (0.0)            | 0 (0.0) |
| Fed. States of Micronesia <sup>3</sup> | 173         | 0 (0.0)                         | 0 (0.0)                          | 3 (1.7)    | 0 (0.0)                   | 167 (96.5)                                | 0 (0.0)    | 1 (0.6)                    | 2 (1.2)            | 0 (0.0) |
| Guam <sup>3</sup>                      | 68          | 0 (0.0)                         | 0 (0.0)                          | 41 (60.3)  | 0 (0.0)                   | 26 (38.2)                                 | 0 (0.0)    | 0 (0.0)                    | 1 (1.5)            | 0 (0.0) |
| Marshall Islands <sup>3</sup>          | 145         | 1 (0.7)                         | 0 (0.0)                          | 0 (0.0)    | 0 (0.0)                   | 142 (97.9)                                | 0 (0.0)    | 1 (0.7)                    | 1 (0.7)            | 0 (0.0) |
| N. Mariana Islands <sup>3</sup>        | 21          | 0 (0.0)                         | 0 (0.0)                          | 12 (57.1)  | 0 (0.0)                   | 8 (38.1)                                  | 0 (0.0)    | 0 (0.0)                    | 1 (4.8)            | 0 (0.0) |
| Puerto Rico <sup>3</sup>               | 71          | 70 (98.6)                       | 0 (0.0)                          | 0 (0.0)    | 1 (1.4)                   | 0 (0.0)                                   | 0 (0.0)    | 0 (0.0)                    | 0 (0.0)            | 0 (0.0) |
| Republic of Palau <sup>3</sup>         | 4           | 0 (0.0)                         | 0 (0.0)                          | 1 (25.0)   | 0 (0.0)                   | 3 (75.0)                                  | 0 (0.0)    | 0 (0.0)                    | 0 (0.0)            | 0 (0.0) |
| U.S. Virgin Islands <sup>3</sup>       | 4           | 2 (50.0)                        | 0 (0.0)                          | 0 (0.0)    | 1 (25.0)                  | 0 (0.0)                                   | 0 (0.0)    | 0 (0.0)                    | 1 (25.0)           | 0 (0.0) |

<sup>1</sup> Persons of Hispanic origin may be of any race or multiple race.

<sup>2</sup> Indicates two or more races reported for a person.

<sup>3</sup> Not included in U.S. totals.

Note: Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple Race does not include persons of Hispanic ethnicity. See Technical Notes.

**Table 34. Tuberculosis Cases and Percentages, U.S.-born and Foreign-born Persons<sup>1</sup>: Reporting Areas, 2012**

| Reporting Area       | Total Cases  | U.S.-born Persons |               | Foreign-born Persons <sup>1</sup> |               | Unknown Origin |              |
|----------------------|--------------|-------------------|---------------|-----------------------------------|---------------|----------------|--------------|
|                      |              | No.               | (%)           | No.                               | (%)           | No.            | (%)          |
| <b>United States</b> | <b>9,945</b> | <b>3,659</b>      | <b>(36.8)</b> | <b>6,274</b>                      | <b>(63.1)</b> | <b>12</b>      | <b>(0.1)</b> |
| Alabama              | 134          | 108               | (80.6)        | 26                                | (19.4)        | 0              | (0.0)        |
| Alaska               | 66           | 51                | (77.3)        | 11                                | (16.7)        | 4              | (6.1)        |
| Arizona              | 211          | 60                | (28.4)        | 149                               | (70.6)        | 2              | (0.9)        |
| Arkansas             | 70           | 51                | (72.9)        | 19                                | (27.1)        | 0              | (0.0)        |
| California           | 2,191        | 473               | (21.6)        | 1,717                             | (78.4)        | 1              | (0.0)        |
| Colorado             | 64           | 20                | (31.3)        | 44                                | (68.8)        | 0              | (0.0)        |
| Connecticut          | 74           | 13                | (17.6)        | 61                                | (82.4)        | 0              | (0.0)        |
| Delaware             | 28           | 10                | (35.7)        | 18                                | (64.3)        | 0              | (0.0)        |
| District of Columbia | 37           | 17                | (45.9)        | 20                                | (54.1)        | 0              | (0.0)        |
| Florida              | 679          | 348               | (51.3)        | 331                               | (48.7)        | 0              | (0.0)        |
| Georgia              | 357          | 203               | (56.9)        | 153                               | (42.9)        | 1              | (0.3)        |
| Hawaii               | 117          | 29                | (24.8)        | 88                                | (75.2)        | 0              | (0.0)        |
| Idaho                | 15           | 3                 | (20.0)        | 12                                | (80.0)        | 0              | (0.0)        |
| Illinois             | 347          | 106               | (30.5)        | 241                               | (69.5)        | 0              | (0.0)        |
| Indiana              | 102          | 59                | (57.8)        | 43                                | (42.2)        | 0              | (0.0)        |
| Iowa                 | 46           | 14                | (30.4)        | 31                                | (67.4)        | 1              | (2.2)        |
| Kansas               | 42           | 12                | (28.6)        | 30                                | (71.4)        | 0              | (0.0)        |
| Kentucky             | 80           | 55                | (68.8)        | 25                                | (31.3)        | 0              | (0.0)        |
| Louisiana            | 149          | 116               | (77.9)        | 33                                | (22.1)        | 0              | (0.0)        |
| Maine                | 17           | 7                 | (41.2)        | 10                                | (58.8)        | 0              | (0.0)        |
| Maryland             | 224          | 52                | (23.2)        | 171                               | (76.3)        | 1              | (0.4)        |
| Massachusetts        | 215          | 29                | (13.5)        | 186                               | (86.5)        | 0              | (0.0)        |
| Michigan             | 149          | 75                | (50.3)        | 74                                | (49.7)        | 0              | (0.0)        |
| Minnesota            | 162          | 26                | (16.0)        | 136                               | (84.0)        | 0              | (0.0)        |
| Mississippi          | 81           | 70                | (86.4)        | 11                                | (13.6)        | 0              | (0.0)        |
| Missouri             | 89           | 49                | (55.1)        | 40                                | (44.9)        | 0              | (0.0)        |
| Montana              | 5            | 5                 | (100.0)       | 0                                 | (0.0)         | 0              | (0.0)        |
| Nebraska             | 22           | 8                 | (36.4)        | 14                                | (63.6)        | 0              | (0.0)        |
| Nevada               | 82           | 20                | (24.4)        | 61                                | (74.4)        | 1              | (1.2)        |
| New Hampshire        | 9            | 0                 | (0.0)         | 9                                 | (100.0)       | 0              | (0.0)        |
| New Jersey           | 302          | 56                | (18.5)        | 246                               | (81.5)        | 0              | (0.0)        |
| New Mexico           | 40           | 21                | (52.5)        | 19                                | (47.5)        | 0              | (0.0)        |
| New York             | 866          | 173               | (20.0)        | 693                               | (80.0)        | 0              | (0.0)        |
| North Carolina       | 211          | 114               | (54.0)        | 97                                | (46.0)        | 0              | (0.0)        |
| North Dakota         | 26           | 22                | (84.6)        | 4                                 | (15.4)        | 0              | (0.0)        |
| Ohio                 | 149          | 77                | (51.7)        | 72                                | (48.3)        | 0              | (0.0)        |
| Oklahoma             | 88           | 57                | (64.8)        | 31                                | (35.2)        | 0              | (0.0)        |
| Oregon               | 61           | 17                | (27.9)        | 44                                | (72.1)        | 0              | (0.0)        |
| Pennsylvania         | 234          | 93                | (39.7)        | 141                               | (60.3)        | 0              | (0.0)        |
| Rhode Island         | 23           | 10                | (43.5)        | 13                                | (56.5)        | 0              | (0.0)        |
| South Carolina       | 122          | 94                | (77.0)        | 28                                | (23.0)        | 0              | (0.0)        |
| South Dakota         | 19           | 12                | (63.2)        | 7                                 | (36.8)        | 0              | (0.0)        |
| Tennessee            | 164          | 115               | (70.1)        | 49                                | (29.9)        | 0              | (0.0)        |
| Texas                | 1,233        | 571               | (46.3)        | 662                               | (53.7)        | 0              | (0.0)        |
| Utah                 | 37           | 10                | (27.0)        | 27                                | (73.0)        | 0              | (0.0)        |
| Vermont              | 4            | 0                 | (0.0)         | 4                                 | (100.0)       | 0              | (0.0)        |
| Virginia             | 235          | 52                | (22.1)        | 183                               | (77.9)        | 0              | (0.0)        |
| Washington           | 185          | 45                | (24.3)        | 140                               | (75.7)        | 0              | (0.0)        |
| West Virginia        | 8            | 6                 | (75.0)        | 2                                 | (25.0)        | 0              | (0.0)        |
| Wisconsin            | 71           | 24                | (33.8)        | 46                                | (64.8)        | 1              | (1.4)        |
| Wyoming              | 3            | 1                 | (33.3)        | 2                                 | (66.7)        | 0              | (0.0)        |

<sup>1</sup>Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

Note: See Surveillance Slide #16.

**This page intentionally left blank**

68

**Table 35. Tuberculosis Cases and Percentages in Foreign-born Persons<sup>1</sup> by Top 7 Countries of Birth: Reporting Areas, 2012**

**Table 35. (Cont'd) Tuberculosis Cases and Percentages in Foreign-born Persons<sup>1</sup> by Top 7 Countries of Birth:  
Reporting Areas, 2012**

| Reporting Area | Total Cases | Country of Origin |                        |                  |                    |                  |                  |                      |                                    |              |            | Unknown or Missing<br>No. (%) |
|----------------|-------------|-------------------|------------------------|------------------|--------------------|------------------|------------------|----------------------|------------------------------------|--------------|------------|-------------------------------|
|                |             | Mexico<br>No. (%) | Philippines<br>No. (%) | India<br>No. (%) | Vietnam<br>No. (%) | China<br>No. (%) | Haiti<br>No. (%) | Guatemala<br>No. (%) | All Others <sup>2</sup><br>No. (%) |              |            |                               |
| Nebraska       | 14          | 2<br>(14.3)       | 0<br>(0.0)             | 1<br>(7.1)       | 4<br>(28.6)        | 0<br>(0.0)       | 0<br>(0.0)       | 0<br>(0.0)           | 6<br>(42.9)                        | 1<br>(7.1)   |            |                               |
| Nevada         | 61          | 15<br>(24.6)      | 21<br>(34.4)           | 0<br>(0.0)       | 2<br>(3.3)         | 5<br>(8.2)       | 0<br>(0.0)       | 2<br>(3.3)           | 16<br>(26.2)                       | 0<br>(0.0)   |            |                               |
| New Hampshire  | 9           | 2<br>(22.2)       | 0<br>(0.0)             | 2<br>(22.2)      | 1<br>(11.1)        | 0<br>(0.0)       | 0<br>(0.0)       | 0<br>(0.0)           | 4<br>(44.4)                        | 0<br>(0.0)   |            |                               |
| New Jersey     | 246         | 15<br>(6.1)       | 41<br>(16.7)           | 65<br>(26.4)     | 7<br>(2.8)         | 9<br>(3.7)       | 16<br>(6.5)      | 5<br>(2.0)           | 88<br>(35.8)                       | 0<br>(0.0)   |            |                               |
| New Mexico     | 19          | 15<br>(78.9)      | 0<br>(0.0)             | 1<br>(5.3)       | 0<br>(0.0)         | 0<br>(0.0)       | 0<br>(0.0)       | 1<br>(5.3)           | 2<br>(10.5)                        | 0<br>(0.0)   |            |                               |
| New York       | 693         | 38<br>(5.5)       | 44<br>(6.3)            | 52<br>(7.5)      | 4<br>(0.6)         | 107<br>(15.4)    | 34<br>(4.9)      | 14<br>(2.0)          | 400<br>(57.7)                      | 0<br>(0.0)   |            |                               |
| North Carolina | 97          | 21<br>(21.6)      | 5<br>(5.2)             | 9<br>(9.3)       | 13<br>(13.4)       | 1<br>(1.0)       | 2<br>(2.1)       | 5<br>(5.2)           | 37<br>(38.1)                       | 4<br>(4.1)   |            |                               |
| North Dakota   | 4           | 0<br>(0.0)        | 1<br>(25.0)            | 0<br>(0.0)       | 0<br>(0.0)         | 0<br>(0.0)       | 0<br>(0.0)       | 0<br>(0.0)           | 3<br>(75.0)                        | 0<br>(0.0)   |            |                               |
| Ohio           | 72          | 7<br>(9.7)        | 4<br>(5.6)             | 8<br>(11.1)      | 2<br>(2.8)         | 5<br>(6.9)       | 1<br>(1.4)       | 4<br>(5.6)           | 41<br>(56.9)                       | 0<br>(0.0)   |            |                               |
| Oklahoma       | 31          | 7<br>(22.6)       | 1<br>(3.2)             | 3<br>(9.7)       | 2<br>(6.5)         | 1<br>(3.2)       | 0<br>(0.0)       | 0<br>(0.0)           | 17<br>(54.8)                       | 0<br>(0.0)   |            |                               |
| Oregon         | 44          | 13<br>(29.5)      | 2<br>(4.5)             | 1<br>(2.3)       | 12<br>(27.3)       | 3<br>(6.8)       | 0<br>(0.0)       | 4<br>(9.1)           | 9<br>(20.5)                        | 0<br>(0.0)   |            |                               |
| Pennsylvania   | 141         | 8<br>(5.7)        | 10<br>(7.1)            | 26<br>(18.4)     | 20<br>(14.2)       | 7<br>(5.0)       | 4<br>(2.8)       | 2<br>(1.4)           | 64<br>(45.4)                       | 0<br>(0.0)   |            |                               |
| Rhode Island   | 13          | 0<br>(0.0)        | 0<br>(0.0)             | 0<br>(0.0)       | 0<br>(0.0)         | 0<br>(0.0)       | 0<br>(0.0)       | 0<br>(0.0)           | 3<br>(23.1)                        | 10<br>(76.9) | 0<br>(0.0) |                               |
| South Carolina | 28          | 5<br>(17.9)       | 6<br>(21.4)            | 3<br>(10.7)      | 2<br>(7.1)         | 0<br>(0.0)       | 0<br>(0.0)       | 0<br>(0.0)           | 2<br>(7.1)                         | 10<br>(35.7) | 0<br>(0.0) |                               |
| South Dakota   | 7           | 0<br>(0.0)        | 0<br>(0.0)             | 0<br>(0.0)       | 0<br>(0.0)         | 0<br>(0.0)       | 0<br>(0.0)       | 0<br>(0.0)           | 6<br>(85.7)                        | 1<br>(14.3)  |            |                               |
| Tennessee      | 49          | 8<br>(16.3)       | 3<br>(6.1)             | 6<br>(12.2)      | 0<br>(0.0)         | 1<br>(2.0)       | 0<br>(0.0)       | 4<br>(8.2)           | 27<br>(55.1)                       | 0<br>(0.0)   |            |                               |
| Texas          | 662         | 325<br>(49.1)     | 31<br>(4.7)            | 44<br>(6.6)      | 54<br>(8.2)        | 13<br>(2.0)      | 2<br>(0.3)       | 19<br>(2.9)          | 174<br>(26.3)                      | 0<br>(0.0)   |            |                               |
| Utah           | 27          | 7<br>(25.9)       | 4<br>(14.8)            | 0<br>(0.0)       | 0<br>(0.0)         | 1<br>(25.0)      | 0<br>(0.0)       | 0<br>(0.0)           | 14<br>(51.9)                       | 0<br>(0.0)   |            |                               |
| Vermont        | 4           | 0<br>(0.0)        | 0<br>(0.0)             | 0<br>(0.0)       | 1<br>(25.0)        | 1<br>(3.7)       | 0<br>(0.0)       | 0<br>(0.0)           | 2<br>(50.0)                        | 0<br>(0.0)   |            |                               |
| Virginia       | 183         | 12<br>(6.6)       | 13<br>(7.1)            | 18<br>(9.8)      | 19<br>(10.4)       | 3<br>(1.6)       | 2<br>(1.1)       | 6<br>(3.3)           | 110<br>(60.1)                      | 0<br>(0.0)   |            |                               |
| Washington     | 140         | 17<br>(12.1)      | 20<br>(14.3)           | 13<br>(9.3)      | 12<br>(8.6)        | 5<br>(3.6)       | 1<br>(0.7)       | 5<br>(3.6)           | 66<br>(47.1)                       | 1<br>(0.7)   |            |                               |
| West Virginia  | 2           | 0<br>(0.0)        | 0<br>(0.0)             | 1<br>(50.0)      | 0<br>(0.0)         | 0<br>(0.0)       | 0<br>(0.0)       | 0<br>(0.0)           | 1<br>(50.0)                        | 0<br>(0.0)   |            |                               |
| Wisconsin      | 46          | 11<br>(23.9)      | 3<br>(6.5)             | 7<br>(15.2)      | 1<br>(2.2)         | 3<br>(6.5)       | 0<br>(0.0)       | 0<br>(0.0)           | 21<br>(45.7)                       | 0<br>(0.0)   |            |                               |
| Wyoming        | 2           | 0<br>(0.0)        | 0<br>(0.0)             | 0<br>(0.0)       | 0<br>(0.0)         | 0<br>(0.0)       | 0<br>(0.0)       | 0<br>(0.0)           | 2<br>(100.0)                       | 0<br>(0.0)   |            |                               |

<sup>1</sup>Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor outlying and Pacific islands.

<sup>2</sup>Includes 139 countries.

Note: See Surveillance Slide #19.

**Table 36. Tuberculosis Cases and Percentages in Foreign-born Persons<sup>1</sup> by Immigration Status at First Entry:  
Reporting Areas, 2012**

| Reporting Area       | Total Cases   | Asylee or Parolee<br>No. (%) | Employment Visa<br>No. (%) | Family/Fiance Visa<br>No. (%) | Immigrant Visa<br>No. (%) | Refugee<br>No. (%) | Student Visa<br>No. (%) | Tourist Visa<br>No. (%) | Other Immigration Status <sup>2</sup><br>No. (%) | Unknown or Missing<br>No. (%) |
|----------------------|---------------|------------------------------|----------------------------|-------------------------------|---------------------------|--------------------|-------------------------|-------------------------|--------------------------------------------------|-------------------------------|
|                      | United States | 6274                         | 22 (0.4)                   | 100 (1.6)                     | 136 (2.2)                 | 1437 (22.9)        | 358 (5.7)               | 104 (1.7)               | 1312 (20.9)                                      | 2050 (32.7)                   |
| Alabama              | 26            | 0 (0.0)                      | 2 (7.7)                    | 2 (7.7)                       | 3 (11.5)                  | 2 (7.7)            | 1 (3.8)                 | 6 (23.1)                | 6 (23.1)                                         |                               |
| Alaska               | 11            | 0 (0.0)                      | 1 (9.1)                    | 0 (0.0)                       | 3 (27.3)                  | 0 (0.0)            | 0 (0.0)                 | 2 (18.2)                | 2 (18.2)                                         | 5 (45.5)                      |
| Arizona              | 149           | ...                          | ...                        | ...                           | ...                       | ...                | ...                     | ...                     | ...                                              | ...                           |
| Arkansas             | 19            | 0 (0.0)                      | 0 (0.0)                    | 1 (5.3)                       | 0 (0.0)                   | 0 (0.0)            | 2 (10.5)                | 0 (0.0)                 | 13 (68.4)                                        | 0 (0.0)                       |
| California           | 1717          | 4 (0.2)                      | 23 (1.3)                   | 47 (2.7)                      | 704 (41.0)                | 61 (3.6)           | 42 (2.4)                | 53 (3.1)                | 437 (25.5)                                       | 344 (20.0)                    |
| Colorado             | 44            | 0 (0.0)                      | 1 (2.3)                    | 1 (2.3)                       | 20 (45.5)                 | 8 (18.2)           | 3 (6.8)                 | 1 (2.3)                 | 9 (20.5)                                         | 1 (2.3)                       |
| Connecticut          | 61            | 1 (1.6)                      | 6 (9.8)                    | 3 (4.9)                       | 23 (37.7)                 | 5 (8.2)            | 7 (11.5)                | 4 (6.6)                 | 12 (19.7)                                        | 0 (0.0)                       |
| Delaware             | 18            | 2 (11.1)                     | 2 (11.1)                   | 2 (11.1)                      | 0 (0.0)                   | 0 (0.0)            | 3 (16.7)                | 0 (0.0)                 | 7 (38.9)                                         | 0 (0.0)                       |
| District of Columbia | 20            | 0 (0.0)                      | 0 (0.0)                    | 0 (0.0)                       | 0 (0.0)                   | 0 (0.0)            | 0 (0.0)                 | 0 (0.0)                 | 0 (0.0)                                          | 19 (95.0)                     |
| Florida              | 331           | 5 (1.5)                      | 12 (3.6)                   | 9 (2.7)                       | 83 (25.1)                 | 3 (0.9)            | 5 (1.5)                 | 2 (0.6)                 | 49 (14.8)                                        | 162 (48.9)                    |
| Georgia              | 153           | 1 (0.7)                      | 3 (2.0)                    | 8 (5.2)                       | 35 (22.9)                 | 26 (17.0)          | 4 (2.6)                 | 6 (3.9)                 | 67 (43.8)                                        | 3 (2.0)                       |
| Hawaii               | 88            | 0 (0.0)                      | 0 (0.0)                    | 0 (0.0)                       | 17 (19.3)                 | 0 (0.0)            | 1 (1.1)                 | 0 (0.0)                 | 0 (0.0)                                          | 69 (78.4)                     |
| Idaho                | 12            | 0 (0.0)                      | 0 (0.0)                    | 0 (0.0)                       | 3 (25.0)                  | 4 (33.3)           | 0 (0.0)                 | 0 (0.0)                 | 2 (16.7)                                         | 3 (25.0)                      |
| Illinois             | 241           | 0 (0.0)                      | 0 (0.0)                    | 0 (0.0)                       | 0 (0.0)                   | 0 (0.0)            | 0 (0.0)                 | 0 (0.0)                 | 0 (0.0)                                          | 241 (100.0)                   |
| Indiana              | 43            | 0 (0.0)                      | 0 (0.0)                    | 0 (0.0)                       | 2 (4.7)                   | 10 (23.3)          | 1 (2.3)                 | 0 (0.0)                 | 1 (2.3)                                          | 29 (67.4)                     |
| Iowa                 | 31            | 0 (0.0)                      | 2 (6.5)                    | 0 (0.0)                       | 13 (41.9)                 | 8 (25.8)           | 3 (9.7)                 | 1 (3.2)                 | 4 (12.9)                                         | 0 (0.0)                       |
| Kansas               | 30            | 0 (0.0)                      | 1 (3.3)                    | 3 (10.0)                      | 14 (46.7)                 | 4 (13.3)           | 4 (13.3)                | 0 (0.0)                 | 4 (13.3)                                         | 0 (0.0)                       |
| Kentucky             | 25            | 0 (0.0)                      | 1 (4.0)                    | 0 (0.0)                       | 3 (12.0)                  | 7 (28.0)           | 0 (0.0)                 | 1 (4.0)                 | 11 (44.0)                                        | 1 (4.0)                       |
| Louisiana            | 33            | 0 (0.0)                      | 1 (3.0)                    | 2 (6.1)                       | 9 (27.3)                  | 1 (3.0)            | 3 (9.1)                 | 0 (0.0)                 | 5 (15.2)                                         | 12 (36.4)                     |
| Maine                | 10            | 1 (10.0)                     | 0 (0.0)                    | 2 (20.0)                      | 1 (10.0)                  | 2 (20.0)           | 0 (0.0)                 | 2 (20.0)                | 0 (0.0)                                          | 2 (20.0)                      |
| Maryland             | 171           | 2 (1.2)                      | 4 (2.3)                    | 9 (5.3)                       | 79 (46.2)                 | 8 (4.7)            | 15 (8.8)                | 7 (4.1)                 | 24 (14.0)                                        | 23 (13.5)                     |
| Massachusetts        | 186           | 1 (0.5)                      | 0 (0.0)                    | 1 (0.5)                       | 9 (4.8)                   | 0 (0.0)            | 0 (0.0)                 | 1 (0.5)                 | 1 (0.5)                                          | 173 (93.0)                    |
| Michigan             | 74            | 0 (0.0)                      | 2 (2.7)                    | 1 (1.4)                       | 22 (29.7)                 | 5 (6.8)            | 2 (2.7)                 | 3 (4.1)                 | 25 (33.8)                                        | 14 (18.9)                     |
| Minnesota            | 136           | 3 (2.2)                      | 1 (0.7)                    | 16 (11.8)                     | 26 (19.1)                 | 65 (47.8)          | 4 (2.9)                 | 3 (2.2)                 | 13 (9.6)                                         | 5 (3.7)                       |
| Mississippi          | 11            | 0 (0.0)                      | 0 (0.0)                    | 0 (0.0)                       | 0 (0.0)                   | 0 (0.0)            | 0 (0.0)                 | 0 (0.0)                 | 2 (18.2)                                         | 9 (81.8)                      |
| Missouri             | 40            | 0 (0.0)                      | 0 (0.0)                    | 0 (0.0)                       | 0 (0.0)                   | 0 (0.0)            | 0 (0.0)                 | 0 (0.0)                 | 0 (0.0)                                          | 7 (17.5)                      |
| Montana              | 0             | 0 (0.0)                      | 0 (0.0)                    | 0 (0.0)                       | 0 (0.0)                   | 0 (0.0)            | 0 (0.0)                 | 0 (0.0)                 | 0 (0.0)                                          | ...                           |
| Nebraska             | 14            | 0 (0.0)                      | 0 (0.0)                    | 0 (0.0)                       | 2 (14.3)                  | 4 (28.6)           | 1 (7.1)                 | 0 (0.0)                 | 1 (7.1)                                          | 6 (42.9)                      |

**Table 36. (Con't) Tuberculosis Cases and Percentages in Foreign-born Persons<sup>1</sup> by Immigration Status at First Entry:  
Reporting Areas, 2012**

| Reporting Area              | Total Cases | Asylee or Parolee |       | Employment Visa |        | Family/Fiance Visa |       | Immigrant Visa |        | Refugee |        | Student Visa |        | Tourist Visa |       | Other Immigration Status <sup>2</sup> |        | Unknown or Missing |         |
|-----------------------------|-------------|-------------------|-------|-----------------|--------|--------------------|-------|----------------|--------|---------|--------|--------------|--------|--------------|-------|---------------------------------------|--------|--------------------|---------|
|                             |             | No.               | (%)   | No.             | (%)    | No.                | (%)   | No.            | (%)    | No.     | (%)    | No.          | (%)    | No.          | (%)   | No.                                   | (%)    | No.                | (%)     |
| Nevada                      | 61          | 0                 | (0.0) | 1               | (1.6)  | 0                  | (0.0) | 40             | (65.6) | 4       | (6.6)  | 0            | (0.0)  | 1            | (1.6) | 7                                     | (11.5) | 8                  | (13.1)  |
| New Hampshire               | 9           | 0                 | (0.0) | 0               | (0.0)  | 0                  | (0.0) | 2              | (22.2) | 4       | (44.4) | 0            | (0.0)  | 0            | (0.0) | 0                                     | (0.0)  | 3                  | (33.3)  |
| New Jersey                  | 246         | 0                 | (0.0) | 5               | (2.0)  | 2                  | (0.8) | 155            | (63.0) | 0       | (0.0)  | 3            | (1.2)  | 5            | (2.0) | 51                                    | (20.7) | 24                 | (9.8)   |
| New Mexico                  | 19          | 0                 | (0.0) | 0               | (0.0)  | 0                  | (0.0) | 0              | (0.0)  | 0       | (0.0)  | 0            | (0.0)  | 0            | (0.0) | 1                                     | (5.3)  | 18                 | (94.7)  |
| New York State <sup>3</sup> | 150         | 0                 | (0.0) | 1               | (0.7)  | 3                  | (2.0) | 22             | (14.7) | 18      | (12.0) | 10           | (6.7)  | 2            | (1.3) | 83                                    | (55.3) | 11                 | (7.3)   |
| New York City               | 543         | ...               | ...   | ...             | ...    | ...                | ...   | ...            | ...    | ...     | ...    | ...          | ...    | ...          | ...   | ...                                   | ...    | ...                | ...     |
| North Carolina              | 97          | 0                 | (0.0) | 2               | (2.1)  | 2                  | (2.1) | 11             | (11.3) | 15      | (15.5) | 4            | (4.1)  | 1            | (1.0) | 40                                    | (41.2) | 22                 | (22.7)  |
| North Dakota                | 4           | 0                 | (0.0) | 0               | (0.0)  | 0                  | (0.0) | 1              | (25.0) | 0       | (0.0)  | 1            | (25.0) | 0            | (0.0) | 0                                     | (0.0)  | 2                  | (50.0)  |
| Ohio                        | 72          | 0                 | (0.0) | 4               | (5.6)  | 2                  | (2.8) | 7              | (9.7)  | 5       | (6.9)  | 4            | (5.6)  | 0            | (0.0) | 6                                     | (8.3)  | 44                 | (61.1)  |
| Oklahoma                    | 31          | 0                 | (0.0) | 0               | (0.0)  | 2                  | (6.5) | 1              | (3.2)  | 7       | (22.6) | 1            | (3.2)  | 0            | (0.0) | 3                                     | (9.7)  | 17                 | (54.8)  |
| Oregon                      | 44          | 0                 | (0.0) | 0               | (0.0)  | 0                  | (0.0) | 9              | (20.5) | 5       | (11.4) | 4            | (9.1)  | 0            | (0.0) | 4                                     | (9.1)  | 22                 | (50.0)  |
| Pennsylvania                | 141         | 2                 | (1.4) | 9               | (6.4)  | 5                  | (3.5) | 59             | (41.8) | 16      | (11.3) | 5            | (3.5)  | 5            | (3.5) | 33                                    | (23.4) | 7                  | (5.0)   |
| Rhode Island                | 13          | 0                 | (0.0) | 0               | (0.0)  | 0                  | (0.0) | 2              | (15.4) | 0       | (0.0)  | 0            | (0.0)  | 0            | (0.0) | 1                                     | (7.7)  | 10                 | (76.9)  |
| South Carolina              | 28          | 0                 | (0.0) | 1               | (3.6)  | 0                  | (0.0) | 5              | (17.9) | 2       | (7.1)  | 0            | (0.0)  | 1            | (3.6) | 4                                     | (14.3) | 13                 | (46.4)  |
| South Dakota                | 7           | 0                 | (0.0) | 1               | (14.3) | 0                  | (0.0) | 0              | (0.0)  | 3       | (42.9) | 0            | (0.0)  | 0            | (0.0) | 1                                     | (14.3) | 2                  | (28.6)  |
| Tennessee                   | 49          | ...               | ...   | ...             | ...    | ...                | ...   | ...            | ...    | ...     | ...    | ...          | ...    | ...          | ...   | ...                                   | ...    | ...                | ...     |
| Texas                       | 662         | 0                 | (0.0) | 10              | (1.5)  | 13                 | (2.0) | 30             | (4.5)  | 39      | (5.9)  | 19           | (2.9)  | 2            | (0.3) | 354                                   | (53.5) | 194                | (29.3)  |
| Utah                        | 27          | 0                 | (0.0) | 1               | (3.7)  | 0                  | (0.0) | 13             | (48.1) | 7       | (25.9) | 1            | (3.7)  | 0            | (0.0) | 5                                     | (18.5) | 0                  | (0.0)   |
| Vermont                     | 4           | 0                 | (0.0) | 0               | (0.0)  | 0                  | (0.0) | 2              | (50.0) | 1       | (25.0) | 0            | (0.0)  | 0            | (0.0) | 0                                     | (0.0)  | 0                  | (0.0)   |
| Virginia                    | 183         | ...               | ...   | ...             | ...    | ...                | ...   | ...            | ...    | ...     | ...    | ...          | ...    | ...          | ...   | ...                                   | ...    | ...                | ...     |
| Washington                  | 140         | 0                 | (0.0) | 0               | (0.0)  | 0                  | (0.0) | 0              | (0.0)  | 0       | (0.0)  | 0            | (0.0)  | 0            | (0.0) | 0                                     | (0.0)  | 140                | (100.0) |
| West Virginia               | 2           | 0                 | (0.0) | 1               | (50.0) | 0                  | (0.0) | 0              | (0.0)  | 0       | (0.0)  | 1            | (50.0) | 0            | (0.0) | 0                                     | (0.0)  | 0                  | (0.0)   |
| Wisconsin                   | 46          | 0                 | (0.0) | 1               | (2.2)  | 0                  | (0.0) | 8              | (17.4) | 7       | (15.2) | 0            | (0.0)  | 2            | (4.3) | 22                                    | (47.8) | 2                  | (4.3)   |
| Wyoming                     | 2           | 0                 | (0.0) | 1               | (50.0) | 0                  | (0.0) | 0              | (0.0)  | 1       | (50.0) | 0            | (0.0)  | 0            | (0.0) | 0                                     | (0.0)  | 0                  | (0.0)   |

<sup>1</sup> Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor outlying and Pacific Islands.  
<sup>2</sup> Other immigration status includes (but is not limited to) foreign-born persons who were not required to obtain a visa or persons with no official immigration status (ie. undocumented).  
<sup>3</sup> Excludes New York City.

NOTE: Arizona, Tennessee, Virginia, and New York City do not collect immigration status at first entry to the U.S. due to directives or policies that prohibit that activity.  
Ellipses indicate data are not available.

**Table 37. Tuberculosis Cases and Percentages in Foreign-born Persons<sup>1</sup> by Number of Years in the United States: Reporting Areas, 2012**

| Reporting Area       | Total Cases  | <1 Year    |               | 1–4          |               | 5–9        |               | 10–19        |               | ≥20          |               | Unknown or Missing |              |
|----------------------|--------------|------------|---------------|--------------|---------------|------------|---------------|--------------|---------------|--------------|---------------|--------------------|--------------|
|                      |              | No.        | (%)           | No.          | (%)           | No.        | (%)           | No.          | (%)           | No.          | (%)           |                    |              |
| <b>United States</b> | <b>6,274</b> | <b>940</b> | <b>(15.0)</b> | <b>1,101</b> | <b>(17.5)</b> | <b>927</b> | <b>(14.8)</b> | <b>1,199</b> | <b>(19.1)</b> | <b>1,573</b> | <b>(25.1)</b> | <b>534</b>         | <b>(8.5)</b> |
| Alabama              | 26           | 5          | (19.2)        | 4            | (15.4)        | 11         | (42.3)        | 4            | (15.4)        | 2            | (7.7)         | 0                  | (0.0)        |
| Alaska               | 11           | 0          | (0.0)         | 5            | (45.5)        | 1          | (9.1)         | 1            | (9.1)         | 2            | (18.2)        | 2                  | (18.2)       |
| Arizona              | 149          | 62         | (41.6)        | 16           | (10.7)        | 13         | (8.7)         | 18           | (12.1)        | 26           | (17.4)        | 14                 | (9.4)        |
| Arkansas             | 19           | 4          | (21.1)        | 5            | (26.3)        | 1          | (5.3)         | 3            | (15.8)        | 5            | (26.3)        | 1                  | (5.3)        |
| California           | 1,717        | 149        | (8.7)         | 200          | (11.6)        | 186        | (10.8)        | 325          | (18.9)        | 602          | (35.1)        | 255                | (14.9)       |
| Colorado             | 44           | 7          | (15.9)        | 9            | (20.5)        | 6          | (13.6)        | 12           | (27.3)        | 6            | (13.6)        | 4                  | (9.1)        |
| Connecticut          | 61           | 17         | (27.9)        | 17           | (27.9)        | 7          | (11.5)        | 10           | (16.4)        | 10           | (16.4)        | 0                  | (0.0)        |
| Delaware             | 18           | 2          | (11.1)        | 4            | (22.2)        | 3          | (16.7)        | 4            | (22.2)        | 5            | (27.8)        | 0                  | (0.0)        |
| District of Columbia | 20           | 4          | (20.0)        | 8            | (40.0)        | 2          | (10.0)        | 3            | (15.0)        | 2            | (10.0)        | 1                  | (5.0)        |
| Florida              | 331          | 56         | (16.9)        | 47           | (14.2)        | 58         | (17.5)        | 73           | (22.1)        | 67           | (20.2)        | 30                 | (9.1)        |
| Georgia              | 153          | 28         | (18.3)        | 39           | (25.5)        | 23         | (15.0)        | 34           | (22.2)        | 24           | (15.7)        | 5                  | (3.3)        |
| Hawaii               | 88           | 13         | (14.8)        | 13           | (14.8)        | 13         | (14.8)        | 12           | (13.6)        | 26           | (29.5)        | 11                 | (12.5)       |
| Idaho                | 12           | 5          | (41.7)        | 2            | (16.7)        | 1          | (8.3)         | 1            | (8.3)         | 3            | (25.0)        | 0                  | (0.0)        |
| Illinois             | 241          | 32         | (13.3)        | 47           | (19.5)        | 27         | (11.2)        | 65           | (27.0)        | 65           | (27.0)        | 5                  | (2.1)        |
| Indiana              | 43           | 7          | (16.3)        | 7            | (16.3)        | 2          | (4.7)         | 7            | (16.3)        | 1            | (2.3)         | 19                 | (44.2)       |
| Iowa                 | 31           | 2          | (6.5)         | 1            | (3.2)         | 1          | (3.2)         | 2            | (6.5)         | 0            | (0.0)         | 25                 | (80.6)       |
| Kansas               | 30           | 7          | (23.3)        | 5            | (16.7)        | 9          | (30.0)        | 1            | (3.3)         | 8            | (26.7)        | 0                  | (0.0)        |
| Kentucky             | 25           | 7          | (28.0)        | 7            | (28.0)        | 5          | (20.0)        | 4            | (16.0)        | 2            | (8.0)         | 0                  | (0.0)        |
| Louisiana            | 33           | 5          | (15.2)        | 9            | (27.3)        | 6          | (18.2)        | 6            | (18.2)        | 5            | (15.2)        | 2                  | (6.1)        |
| Maine                | 10           | 5          | (50.0)        | 1            | (10.0)        | 1          | (10.0)        | 1            | (10.0)        | 2            | (20.0)        | 0                  | (0.0)        |
| Maryland             | 171          | 33         | (19.3)        | 45           | (26.3)        | 35         | (20.5)        | 31           | (18.1)        | 26           | (15.2)        | 1                  | (0.6)        |
| Massachusetts        | 186          | 32         | (17.2)        | 51           | (27.4)        | 31         | (16.7)        | 39           | (21.0)        | 31           | (16.7)        | 2                  | (1.1)        |
| Michigan             | 74           | 12         | (16.2)        | 17           | (23.0)        | 7          | (9.5)         | 14           | (18.9)        | 10           | (13.5)        | 14                 | (18.9)       |
| Minnesota            | 136          | 33         | (24.3)        | 32           | (23.5)        | 39         | (28.7)        | 17           | (12.5)        | 14           | (10.3)        | 1                  | (0.7)        |
| Mississippi          | 11           | 2          | (18.2)        | 5            | (45.5)        | 1          | (9.1)         | 2            | (18.2)        | 1            | (9.1)         | 0                  | (0.0)        |
| Missouri             | 40           | 2          | (5.0)         | 12           | (30.0)        | 7          | (17.5)        | 9            | (22.5)        | 7            | (17.5)        | 3                  | (7.5)        |
| Montana              | 0            | 0          | .             | 0            | .             | 0          | .             | 0            | .             | 0            | .             | 0                  | .            |
| Nebraska             | 14           | 1          | (7.1)         | 2            | (14.3)        | 5          | (35.7)        | 2            | (14.3)        | 3            | (21.4)        | 1                  | (7.1)        |
| Nevada               | 61           | 10         | (16.4)        | 6            | (9.8)         | 13         | (21.3)        | 11           | (18.0)        | 18           | (29.5)        | 3                  | (4.9)        |
| New Hampshire        | 9            | 3          | (33.3)        | 3            | (33.3)        | 1          | (11.1)        | 2            | (22.2)        | 0            | (0.0)         | 0                  | (0.0)        |
| New Jersey           | 246          | 30         | (12.2)        | 58           | (23.6)        | 44         | (17.9)        | 48           | (19.5)        | 45           | (18.3)        | 21                 | (8.5)        |
| New Mexico           | 19           | 5          | (26.3)        | 4            | (21.1)        | 2          | (10.5)        | 3            | (15.8)        | 5            | (26.3)        | 0                  | (0.0)        |
| New York             | 693          | 102        | (14.7)        | 131          | (18.9)        | 106        | (15.3)        | 144          | (20.8)        | 169          | (24.4)        | 41                 | (5.9)        |
| North Carolina       | 97           | 14         | (14.4)        | 21           | (21.6)        | 14         | (14.4)        | 12           | (12.4)        | 10           | (10.3)        | 26                 | (26.8)       |
| North Dakota         | 4            | 1          | (25.0)        | 2            | (50.0)        | 0          | (0.0)         | 0            | (0.0)         | 0            | (0.0)         | 1                  | (25.0)       |
| Ohio                 | 72           | 18         | (25.0)        | 16           | (22.2)        | 13         | (18.1)        | 13           | (18.1)        | 12           | (16.7)        | 0                  | (0.0)        |
| Oklahoma             | 31           | 5          | (16.1)        | 2            | (6.5)         | 3          | (9.7)         | 5            | (16.1)        | 6            | (19.4)        | 10                 | (32.3)       |
| Oregon               | 44           | 3          | (6.8)         | 5            | (11.4)        | 0          | (0.0)         | 10           | (22.7)        | 6            | (13.6)        | 20                 | (45.5)       |
| Pennsylvania         | 141          | 23         | (16.3)        | 29           | (20.6)        | 28         | (19.9)        | 36           | (25.5)        | 25           | (17.7)        | 0                  | (0.0)        |
| Rhode Island         | 13           | 1          | (7.7)         | 3            | (23.1)        | 1          | (7.7)         | 2            | (15.4)        | 4            | (30.8)        | 2                  | (15.4)       |
| South Carolina       | 28           | 5          | (17.9)        | 4            | (14.3)        | 6          | (21.4)        | 2            | (7.1)         | 10           | (35.7)        | 1                  | (3.6)        |
| South Dakota         | 7            | 3          | (42.9)        | 0            | (0.0)         | 1          | (14.3)        | 1            | (14.3)        | 1            | (14.3)        | 1                  | (14.3)       |
| Tennessee            | 49           | 13         | (26.5)        | 8            | (16.3)        | 13         | (26.5)        | 8            | (16.3)        | 7            | (14.3)        | 0                  | (0.0)        |
| Texas                | 662          | 114        | (17.2)        | 108          | (16.3)        | 107        | (16.2)        | 134          | (20.2)        | 199          | (30.1)        | 0                  | (0.0)        |
| Utah                 | 27           | 5          | (18.5)        | 4            | (14.8)        | 5          | (18.5)        | 7            | (25.9)        | 6            | (22.2)        | 0                  | (0.0)        |
| Vermont              | 4            | 1          | (25.0)        | 1            | (25.0)        | 0          | (0.0)         | 1            | (25.0)        | 1            | (25.0)        | 0                  | (0.0)        |
| Virginia             | 183          | 30         | (16.4)        | 42           | (23.0)        | 34         | (18.6)        | 31           | (16.9)        | 43           | (23.5)        | 3                  | (1.6)        |
| Washington           | 140          | 15         | (10.7)        | 31           | (22.1)        | 27         | (19.3)        | 19           | (13.6)        | 42           | (30.0)        | 6                  | (4.3)        |
| West Virginia        | 2            | 0          | (0.0)         | 2            | (100.0)       | 0          | (0.0)         | 0            | (0.0)         | 0            | (0.0)         | 0                  | (0.0)        |
| Wisconsin            | 46           | 6          | (13.0)        | 10           | (21.7)        | 8          | (17.4)        | 10           | (21.7)        | 9            | (19.6)        | 3                  | (6.5)        |
| Wyoming              | 2            | 1          | (50.0)        | 1            | (50.0)        | 0          | (0.0)         | 0            | (0.0)         | 0            | (0.0)         | 0                  | (0.0)        |

<sup>1</sup> Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

**Table 38. Tuberculosis Cases and Percentages by Pulmonary and Extrapulmonary Disease: Reporting Areas, 2012**

| Reporting Area                         | Total Cases  | Pulmonary <sup>1</sup> |               | Extrapulmonary <sup>2</sup> |               | Pulmonary and Extrapulmonary Cases |               |            |
|----------------------------------------|--------------|------------------------|---------------|-----------------------------|---------------|------------------------------------|---------------|------------|
|                                        |              | No.                    | (%)           | No.                         | (%)           | Total <sup>3</sup>                 | Miliary       |            |
| <b>United States</b>                   | <b>9,945</b> | <b>6,808</b>           | <b>(68.5)</b> | <b>2,100</b>                | <b>(21.1)</b> | <b>1,016</b>                       | <b>(10.2)</b> | <b>349</b> |
| Alabama                                | 134          | 110                    | (82.1)        | 21                          | (15.7)        | 3                                  | (2.2)         | 3          |
| Alaska                                 | 66           | 58                     | (87.9)        | 6                           | (9.1)         | 1                                  | (1.5)         | 2          |
| Arizona                                | 211          | 164                    | (77.7)        | 27                          | (12.8)        | 20                                 | (9.5)         | 13         |
| Arkansas                               | 70           | 45                     | (64.3)        | 20                          | (28.6)        | 5                                  | (7.1)         | 3          |
| California                             | 2,191        | 1,456                  | (66.5)        | 499                         | (22.8)        | 236                                | (10.8)        | 74         |
| Colorado                               | 64           | 33                     | (51.6)        | 19                          | (29.7)        | 12                                 | (18.8)        | 5          |
| Connecticut                            | 74           | 37                     | (50.0)        | 18                          | (24.3)        | 15                                 | (20.3)        | 5          |
| Delaware                               | 28           | 14                     | (50.0)        | 11                          | (39.3)        | 3                                  | (10.7)        | 2          |
| District of Columbia                   | 37           | 21                     | (56.8)        | 14                          | (37.8)        | 2                                  | (5.4)         | 2          |
| Florida                                | 679          | 543                    | (80.0)        | 105                         | (15.5)        | 31                                 | (4.6)         | 28         |
| Georgia                                | 357          | 259                    | (72.5)        | 75                          | (21.0)        | 20                                 | (5.6)         | 11         |
| Hawaii                                 | 117          | 84                     | (71.8)        | 23                          | (19.7)        | 10                                 | (8.5)         | 6          |
| Idaho                                  | 15           | 10                     | (66.7)        | 1                           | (6.7)         | 4                                  | (26.7)        | 2          |
| Illinois                               | 347          | 225                    | (64.8)        | 90                          | (25.9)        | 32                                 | (9.2)         | 10         |
| Indiana                                | 102          | 80                     | (78.4)        | 17                          | (16.7)        | 5                                  | (4.9)         | 3          |
| Iowa                                   | 46           | 27                     | (58.7)        | 8                           | (17.4)        | 7                                  | (15.2)        | 1          |
| Kansas                                 | 42           | 32                     | (76.2)        | 7                           | (16.7)        | 3                                  | (7.1)         | 1          |
| Kentucky                               | 80           | 67                     | (83.8)        | 8                           | (10.0)        | 5                                  | (6.3)         | 2          |
| Louisiana                              | 149          | 109                    | (73.2)        | 31                          | (20.8)        | 6                                  | (4.0)         | 1          |
| Maine                                  | 17           | 13                     | (76.5)        | 4                           | (23.5)        | 0                                  | (0.0)         | 1          |
| Maryland                               | 224          | 133                    | (59.4)        | 66                          | (29.5)        | 25                                 | (11.2)        | 7          |
| Massachusetts                          | 215          | 132                    | (61.4)        | 61                          | (28.4)        | 22                                 | (10.2)        | 6          |
| Michigan                               | 149          | 99                     | (66.4)        | 47                          | (31.5)        | 3                                  | (2.0)         | 11         |
| Minnesota                              | 162          | 82                     | (50.6)        | 58                          | (35.8)        | 22                                 | (13.6)        | 3          |
| Mississippi                            | 81           | 65                     | (80.2)        | 10                          | (12.3)        | 6                                  | (7.4)         | 3          |
| Missouri                               | 89           | 64                     | (71.9)        | 17                          | (19.1)        | 8                                  | (9.0)         | 0          |
| Montana                                | 5            | 4                      | (80.0)        | 0                           | (0.0)         | 1                                  | (20.0)        | 1          |
| Nebraska                               | 22           | 11                     | (50.0)        | 10                          | (45.5)        | 1                                  | (4.5)         | 0          |
| Nevada                                 | 82           | 68                     | (82.9)        | 11                          | (13.4)        | 1                                  | (1.2)         | 2          |
| New Hampshire                          | 9            | 6                      | (66.7)        | 2                           | (22.2)        | 1                                  | (11.1)        | 0          |
| New Jersey                             | 302          | 189                    | (62.6)        | 69                          | (22.8)        | 44                                 | (14.6)        | 14         |
| New Mexico                             | 40           | 30                     | (75.0)        | 7                           | (17.5)        | 3                                  | (7.5)         | 1          |
| New York                               | 866          | 539                    | (62.2)        | 214                         | (24.7)        | 113                                | (13.0)        | 31         |
| North Carolina                         | 211          | 143                    | (67.8)        | 53                          | (25.1)        | 15                                 | (7.1)         | 8          |
| North Dakota                           | 26           | 17                     | (65.4)        | 5                           | (19.2)        | 1                                  | (3.8)         | 1          |
| Ohio                                   | 149          | 98                     | (65.8)        | 37                          | (24.8)        | 14                                 | (9.4)         | 3          |
| Oklahoma                               | 88           | 60                     | (68.2)        | 18                          | (20.5)        | 9                                  | (10.2)        | 5          |
| Oregon                                 | 61           | 38                     | (62.3)        | 19                          | (31.1)        | 4                                  | (6.6)         | 1          |
| Pennsylvania                           | 234          | 151                    | (64.5)        | 69                          | (29.5)        | 14                                 | (6.0)         | 10         |
| Rhode Island                           | 23           | 11                     | (47.8)        | 7                           | (30.4)        | 5                                  | (21.7)        | 1          |
| South Carolina                         | 122          | 82                     | (67.2)        | 23                          | (18.9)        | 17                                 | (13.9)        | 2          |
| South Dakota                           | 19           | 12                     | (63.2)        | 3                           | (15.8)        | 4                                  | (21.1)        | 2          |
| Tennessee                              | 164          | 111                    | (67.7)        | 34                          | (20.7)        | 19                                 | (11.6)        | 7          |
| Texas                                  | 1,233        | 938                    | (76.1)        | 119                         | (9.7)         | 176                                | (14.3)        | 24         |
| Utah                                   | 37           | 22                     | (59.5)        | 12                          | (32.4)        | 3                                  | (8.1)         | 3          |
| Vermont                                | 4            | 2                      | (50.0)        | 1                           | (25.0)        | 1                                  | (25.0)        | 1          |
| Virginia                               | 235          | 152                    | (64.7)        | 58                          | (24.7)        | 25                                 | (10.6)        | 11         |
| Washington                             | 185          | 110                    | (59.5)        | 48                          | (25.9)        | 27                                 | (14.6)        | 7          |
| West Virginia                          | 8            | 7                      | (87.5)        | 1                           | (12.5)        | 0                                  | (0.0)         | 1          |
| Wisconsin                              | 71           | 42                     | (59.2)        | 17                          | (23.9)        | 12                                 | (16.9)        | 7          |
| Wyoming                                | 3            | 3                      | (100.0)       | 0                           | (0.0)         | 0                                  | (0.0)         | 1          |
| American Samoa <sup>4</sup>            | 1            | 1                      | (100.0)       | 0                           | (0.0)         | 0                                  | (0.0)         | 1          |
| Fed. States of Micronesia <sup>4</sup> | 173          | 149                    | (86.1)        | 19                          | (11.0)        | 5                                  | (2.9)         | 8          |
| Guam <sup>4</sup>                      | 68           | 58                     | (85.3)        | 8                           | (11.8)        | 2                                  | (2.9)         | 0          |
| Marshall Islands <sup>4</sup>          | 145          | 108                    | (74.5)        | 25                          | (17.2)        | 12                                 | (8.3)         | 1          |
| N. Mariana Islands <sup>4</sup>        | 21           | 18                     | (85.7)        | 2                           | (9.5)         | 1                                  | (4.8)         | 0          |
| Puerto Rico <sup>4</sup>               | 71           | 61                     | (85.9)        | 10                          | (14.1)        | 0                                  | (0.0)         | 0          |
| Republic of Palau <sup>4</sup>         | 4            | 4                      | (100.0)       | 0                           | (0.0)         | 0                                  | (0.0)         | 0          |
| U.S. Virgin Islands <sup>4</sup>       | 4            | 3                      | (75.0)        | 0                           | (0.0)         | 0                                  | (0.0)         | 0          |

<sup>1</sup> Includes cases with pulmonary listed as the only site of disease.

<sup>2</sup> Includes cases with pleural, lymphatic, bone and/or joint, meningeal, peritoneal, genitourinary, or other site, excluding pulmonary, listed as site of disease.

<sup>3</sup> Includes cases with evidence of miliary disease.

<sup>4</sup> Not included in U.S. totals.

Note: 21 cases had missing and/or unknown site of disease.

**Table 39. Extrapulmonary Tuberculosis Cases and Percentages by Site of Disease: Reporting Areas, 2012**

| Reporting Area       | Total<br>Extrapulm.<br>Cases <sup>1</sup> | Total<br>Extrapulm.<br>Cases <sup>1</sup><br>Sites <sup>2</sup> | Site of Disease |               |            |               |            |                   |            |               |            |              |
|----------------------|-------------------------------------------|-----------------------------------------------------------------|-----------------|---------------|------------|---------------|------------|-------------------|------------|---------------|------------|--------------|
|                      |                                           |                                                                 | Pleural         |               |            | Lymphatic     |            | Bone and/or Joint |            | Genitourinary |            | Meningeal    |
|                      |                                           |                                                                 | No.             | (%)           | No.        | (%)           | No.        | (%)               | No.        | (%)           | No.        | (%)          |
| <b>United States</b> | <b>2,100</b>                              | <b>2,213</b>                                                    | <b>368</b>      | <b>(16.6)</b> | <b>846</b> | <b>(38.2)</b> | <b>229</b> | <b>(10.3)</b>     | <b>111</b> | <b>(5.0)</b>  | <b>108</b> | <b>(4.9)</b> |
|                      |                                           |                                                                 |                 |               |            |               |            |                   |            |               |            |              |
| Alabama              | 21                                        | 23                                                              | 7               | (30.4)        | 5          | (21.7)        | 2          | (8.7)             | 0          | (0.0)         | 1          | (4.3)        |
| Alaska               | 6                                         | 6                                                               | 0               | (0.0)         | 5          | (83.3)        | 0          | (0.0)             | 0          | (0.0)         | 0          | (0.0)        |
| Arizona              | 27                                        | 28                                                              | 5               | (17.9)        | 14         | (50.0)        | 1          | (3.6)             | 1          | (3.6)         | 2          | (7.1)        |
| Arkansas             | 20                                        | 20                                                              | 3               | (15.0)        | 3          | (15.0)        | 2          | (10.0)            | 0          | (0.0)         | 2          | (10.0)       |
| California           | 499                                       | 517                                                             | 70              | (13.5)        | 211        | (40.8)        | 45         | (8.7)             | 24         | (4.6)         | 22         | (4.3)        |
| Colorado             | 19                                        | 21                                                              | 4               | (19.0)        | 6          | (28.6)        | 4          | (19.0)            | 2          | (9.5)         | 2          | (9.5)        |
| Connecticut          | 18                                        | 19                                                              | 6               | (31.6)        | 9          | (47.4)        | 2          | (10.5)            | 1          | (5.3)         | 1          | (5.3)        |
| Delaware             | 11                                        | 14                                                              | 2               | (14.3)        | 0          | (0.0)         | 2          | (14.3)            | 2          | (14.3)        | 3          | (21.4)       |
| District of Columbia | 14                                        | 15                                                              | 2               | (13.3)        | 4          | (26.7)        | 2          | (13.3)            | 0          | (0.0)         | 3          | (20.0)       |
| Florida              | 105                                       | 108                                                             | 27              | (25.0)        | 39         | (36.1)        | 10         | (9.3)             | 6          | (5.6)         | 5          | (4.6)        |
| Georgia              | 75                                        | 75                                                              | 17              | (22.7)        | 28         | (37.3)        | 5          | (6.7)             | 3          | (4.0)         | 4          | (5.3)        |
| Hawaii               | 23                                        | 23                                                              | 11              | (47.8)        | 6          | (26.1)        | 0          | (0.0)             | 0          | (0.0)         | 2          | (8.7)        |
| Idaho                | 1                                         | 1                                                               | 0               | (0.0)         | 0          | (0.0)         | 0          | (0.0)             | 0          | (0.0)         | 0          | (0.0)        |
| Illinois             | 90                                        | 97                                                              | 10              | (10.3)        | 36         | (37.1)        | 10         | (10.3)            | 3          | (3.1)         | 4          | (4.1)        |
| Indiana              | 17                                        | 19                                                              | 1               | (5.3)         | 4          | (21.1)        | 4          | (21.1)            | 2          | (10.5)        | 1          | (5.3)        |
| Iowa                 | 8                                         | 8                                                               | 4               | (50.0)        | 2          | (25.0)        | 2          | (25.0)            | 0          | (0.0)         | 0          | (0.0)        |
| Kansas               | 7                                         | 7                                                               | 1               | (14.3)        | 3          | (42.9)        | 2          | (28.6)            | 0          | (0.0)         | 0          | (0.0)        |
| Kentucky             | 8                                         | 9                                                               | 2               | (22.2)        | 1          | (11.1)        | 0          | (0.0)             | 0          | (0.0)         | 1          | (11.1)       |
| Louisiana            | 31                                        | 31                                                              | 5               | (16.1)        | 13         | (41.9)        | 4          | (12.9)            | 1          | (3.2)         | 1          | (3.2)        |
| Maine                | 4                                         | 4                                                               | 1               | (25.0)        | 1          | (25.0)        | 0          | (0.0)             | 1          | (25.0)        | 0          | (0.0)        |
| Maryland             | 66                                        | 71                                                              | 16              | (22.5)        | 26         | (36.6)        | 3          | (4.2)             | 2          | (2.8)         | 3          | (4.2)        |
| Massachusetts        | 61                                        | 64                                                              | 10              | (15.6)        | 25         | (39.1)        | 6          | (9.4)             | 4          | (6.3)         | 5          | (7.8)        |
| Michigan             | 47                                        | 48                                                              | 5               | (10.4)        | 15         | (31.3)        | 6          | (12.5)            | 1          | (2.1)         | 1          | (2.1)        |
| Minnesota            | 58                                        | 63                                                              | 7               | (11.1)        | 31         | (49.2)        | 6          | (9.5)             | 1          | (1.6)         | 2          | (3.2)        |
| Mississippi          | 10                                        | 10                                                              | 6               | (60.0)        | 1          | (10.0)        | 2          | (20.0)            | 0          | (0.0)         | 1          | (10.0)       |
| Missouri             | 17                                        | 18                                                              | 4               | (22.2)        | 7          | (38.9)        | 1          | (5.6)             | 1          | (5.6)         | 1          | (5.6)        |
| Nebraska             | 10                                        | 10                                                              | 0               | (0.0)         | 5          | (50.0)        | 2          | (20.0)            | 0          | (0.0)         | 2          | (20.0)       |
| Nevada               | 11                                        | 12                                                              | 0               | (0.0)         | 3          | (25.0)        | 1          | (8.3)             | 5          | (41.7)        | 1          | (8.3)        |
| New Hampshire        | 2                                         | 2                                                               | 0               | (0.0)         | 1          | (50.0)        | 0          | (0.0)             | 0          | (0.0)         | 0          | (0.0)        |
| New Jersey           | 69                                        | 73                                                              | 16              | (21.9)        | 30         | (41.1)        | 15         | (20.5)            | 2          | (2.7)         | 6          | (8.2)        |
| New Mexico           | 7                                         | 7                                                               | 1               | (14.3)        | 3          | (42.9)        | 2          | (28.6)            | 0          | (0.0)         | 0          | (0.0)        |

(14.3)

**Table 39. (Con't) Extrapulmonary Tuberculosis Cases and Percentages by Site of Disease: Reporting Areas, 2012**

| Reporting Area                         | Total<br>Extrapulm.<br>Cases <sup>1</sup> | Total<br>Extrapulm.<br>Sites <sup>2</sup> | Site of Disease |        |     |           |     |         |                   |        |     |               |     |           |     |            |     |           |  |       |  |
|----------------------------------------|-------------------------------------------|-------------------------------------------|-----------------|--------|-----|-----------|-----|---------|-------------------|--------|-----|---------------|-----|-----------|-----|------------|-----|-----------|--|-------|--|
|                                        |                                           |                                           | Pleural         |        |     | Lymphatic |     |         | Bone and/or Joint |        |     | Genitourinary |     | Meningeal |     | Peritoneal |     | Laryngeal |  | Other |  |
|                                        |                                           |                                           | No.             | (%)    | No. | (%)       | No. | (%)     | No.               | (%)    | No. | (%)           | No. | (%)       | No. | (%)        | No. | (%)       |  |       |  |
| New York                               | 214                                       | 238                                       | 33              | (13.9) | 105 | (44.1)    | 27  | (11.3)  | 11                | (4.6)  | 8   | (3.4)         | 16  | (6.7)     | 1   | (0.4)      | 37  | (15.5)    |  |       |  |
| North Carolina                         | 53                                        | 56                                        | 16              | (28.6) | 23  | (41.1)    | 3   | (5.4)   | 4                 | (7.1)  | 2   | (3.6)         | 3   | (5.4)     | 0   | (0.0)      | 5   | (8.9)     |  |       |  |
| North Dakota                           | 5                                         | 5                                         | 2               | (40.0) | 1   | (20.0)    | 0   | (0.0)   | 0                 | (0.0)  | 0   | (0.0)         | 1   | (20.0)    | 0   | (0.0)      | 1   | (20.0)    |  |       |  |
| Ohio                                   | 37                                        | 38                                        | 5               | (13.2) | 20  | (52.6)    | 5   | (13.2)  | 2                 | (5.3)  | 1   | (2.6)         | 0   | (0.0)     | 0   | (0.0)      | 5   | (13.2)    |  |       |  |
| Oklahoma                               | 18                                        | 18                                        | 3               | (16.7) | 8   | (44.4)    | 3   | (16.7)  | 0                 | (0.0)  | 1   | (5.6)         | 0   | (0.0)     | 0   | (0.0)      | 3   | (16.7)    |  |       |  |
| Oregon                                 | 19                                        | 20                                        | 3               | (15.0) | 7   | (35.0)    | 2   | (10.0)  | 2                 | (10.0) | 0   | (0.0)         | 1   | (5.0)     | 0   | (0.0)      | 5   | (25.0)    |  |       |  |
| Pennsylvania                           | 69                                        | 70                                        | 10              | (14.3) | 25  | (35.7)    | 9   | (12.9)  | 7                 | (10.0) | 4   | (5.7)         | 6   | (8.6)     | 0   | (0.0)      | 9   | (12.9)    |  |       |  |
| Rhode Island                           | 7                                         | 9                                         | 3               | (33.3) | 2   | (22.2)    | 2   | (22.2)  | 0                 | (0.0)  | 0   | (0.0)         | 1   | (11.1)    | 0   | (0.0)      | 1   | (11.1)    |  |       |  |
| South Carolina                         | 23                                        | 24                                        | 8               | (33.3) | 8   | (33.3)    | 3   | (12.5)  | 1                 | (4.2)  | 2   | (8.3)         | 0   | (0.0)     | 0   | (0.0)      | 2   | (8.3)     |  |       |  |
| South Dakota                           | 3                                         | 3                                         | 1               | (33.3) | 1   | (33.3)    | 0   | (0.0)   | 0                 | (0.0)  | 0   | (0.0)         | 0   | (0.0)     | 0   | (0.0)      | 1   | (33.3)    |  |       |  |
| Tennessee                              | 34                                        | 35                                        | 8               | (22.9) | 17  | (48.6)    | 1   | (2.9)   | 0                 | (0.0)  | 4   | (11.4)        | 1   | (2.9)     | 0   | (0.0)      | 4   | (11.4)    |  |       |  |
| Texas                                  | 119                                       | 123                                       | 7               | (5.7)  | 42  | (34.1)    | 16  | (13.0)  | 10                | (8.1)  | 12  | (9.8)         | 7   | (5.7)     | 0   | (0.0)      | 29  | (23.6)    |  |       |  |
| Utah                                   | 12                                        | 12                                        | 1               | (8.3)  | 2   | (16.7)    | 2   | (16.7)  | 1                 | (8.3)  | 0   | (0.0)         | 0   | (0.0)     | 0   | (0.0)      | 6   | (50.0)    |  |       |  |
| Vermont                                | 1                                         | 1                                         | 0               | (0.0)  | 1   | (100.0)   | 0   | (0.0)   | 0                 | (0.0)  | 0   | (0.0)         | 0   | (0.0)     | 0   | (0.0)      | 0   | (0.0)     |  |       |  |
| Virginia                               | 58                                        | 64                                        | 10              | (15.6) | 20  | (31.3)    | 6   | (9.4)   | 4                 | (6.3)  | 3   | (4.7)         | 7   | (10.9)    | 0   | (0.0)      | 14  | (21.9)    |  |       |  |
| Washington                             | 48                                        | 52                                        | 9               | (17.3) | 21  | (40.4)    | 7   | (13.5)  | 4                 | (7.7)  | 2   | (3.8)         | 2   | (3.8)     | 0   | (0.0)      | 7   | (13.5)    |  |       |  |
| West Virginia                          | 1                                         | 1                                         | 0               | (0.0)  | 0   | (0.0)     | 0   | (0.0)   | 0                 | (0.0)  | 0   | (0.0)         | 0   | (0.0)     | 0   | (0.0)      | 1   | (100.0)   |  |       |  |
| Wisconsin                              | 17                                        | 21                                        | 6               | (28.6) | 6   | (28.6)    | 2   | (9.5)   | 1                 | (4.8)  | 0   | (0.0)         | 2   | (9.5)     | 0   | (0.0)      | 4   | (19.0)    |  |       |  |
| Wyoming                                | 0                                         | 0                                         | 0               | (0.0)  | 0   | (0.0)     | 0   | (0.0)   | 0                 | (0.0)  | 0   | (0.0)         | 0   | (0.0)     | 0   | (0.0)      | 0   | (0.0)     |  |       |  |
| American Samoa <sup>3</sup>            | ...                                       | ...                                       | ...             | ...    | ... | ...       | ... | ...     | ...               | ...    | ... | ...           | ... | ...       | ... | ...        | ... | ...       |  |       |  |
| Fed. States of Micronesia <sup>3</sup> | 19                                        | 20                                        | 11              | (55.0) | 7   | (35.0)    | 2   | (10.0)  | 0                 | (0.0)  | 0   | (0.0)         | 0   | (0.0)     | 0   | (0.0)      | 0   | (0.0)     |  |       |  |
| Guam <sup>3</sup>                      | 8                                         | 8                                         | 3               | (37.5) | 1   | (12.5)    | 1   | (12.5)  | 0                 | (0.0)  | 0   | (0.0)         | 1   | (12.5)    | 0   | (0.0)      | 2   | (25.0)    |  |       |  |
| Marshall Islands <sup>3</sup>          | 25                                        | 29                                        | 8               | (27.6) | 13  | (44.8)    | 0   | (0.0)   | 0                 | (0.0)  | 0   | (0.0)         | 7   | (24.1)    | 0   | (0.0)      | 1   | (3.4)     |  |       |  |
| N. Mariana Islands <sup>3</sup>        | 2                                         | 2                                         | 0               | (0.0)  | 0   | (0.0)     | 2   | (100.0) | 0                 | (0.0)  | 0   | (0.0)         | 0   | (0.0)     | 0   | (0.0)      | 0   | (0.0)     |  |       |  |
| Puerto Rico <sup>3</sup>               | 10                                        | 10                                        | 5               | (50.0) | 1   | (10.0)    | 0   | (0.0)   | 0                 | (0.0)  | 1   | (10.0)        | 2   | (20.0)    | 0   | (0.0)      | 1   | (10.0)    |  |       |  |
| Republic of Palau <sup>3</sup>         | ...                                       | ...                                       | ...             | ...    | ... | ...       | ... | ...     | ...               | ...    | ... | ...           | ... | ...       | ... | ...        | ... | ...       |  |       |  |
| U.S. Virgin Islands <sup>3</sup>       | ...                                       | ...                                       | ...             | ...    | ... | ...       | ... | ...     | ...               | ...    | ... | ...           | ... | ...       | ... | ...        | ... | ...       |  |       |  |

<sup>1</sup> Excludes cases with pulmonary site of disease.

<sup>2</sup> Patient may have more than one extrapulmonary site of disease.

<sup>3</sup> Not included in U.S. totals.

Note: Ellipses indicate data not available.  
See Technical Notes.

**Table 40. Tuberculosis Risk Factors: Reporting Areas, 2012**

| Reporting Area       | Total       | MDR Patient Contact | Missed Contact  | Infectious TB Patient Contact | Incomplete LTBI therapy | TNF-Alpha Therapy | Post-organ Transplantation | Diabetes Mellitus  | Renal Disease    | Immuno-suppression | Other              | None               | Missing <sup>2</sup> |
|----------------------|-------------|---------------------|-----------------|-------------------------------|-------------------------|-------------------|----------------------------|--------------------|------------------|--------------------|--------------------|--------------------|----------------------|
|                      |             | No. (%)             | No. (%)         | No. (%)                       | No. (%)                 | No. (%)           | No. (%)                    | No. (%)            | No. (%)          | No. (%)            | No. (%)            | No. (%)            | No. (%)              |
| <b>United States</b> | <b>9945</b> | <b>15 (0.2)</b>     | <b>45 (0.5)</b> | <b>749 (7.5)</b>              | <b>262 (2.6)</b>        | <b>52 (0.5)</b>   | <b>46 (0.5)</b>            | <b>1442 (14.5)</b> | <b>222 (2.2)</b> | <b>416 (4.2)</b>   | <b>2204 (22.2)</b> | <b>4953 (49.8)</b> | <b>371 (3.7)</b>     |
| Alabama              | 134         | 0 (0.0)             | 2 (1.5)         | 20 (14.9)                     | 6 (4.5)                 | 1 (0.7)           | 0 (0.0)                    | 20 (14.9)          | 2 (1.5)          | 6 (4.5)            | 8 (6.0)            | 74 (55.2)          | 0 (0.0)              |
| Alaska               | 66          | 1 (1.5)             | 0 (0.0)         | 18 (27.3)                     | 1 (1.5)                 | 0 (0.0)           | 0 (0.0)                    | 2 (3.0)            | 0 (0.0)          | 1 (1.5)            | 3 (4.5)            | 40 (60.6)          | 0 (0.0)              |
| Arizona              | 211         | 0 (0.0)             | 1 (0.5)         | 8 (3.8)                       | 5 (2.4)                 | 3 (1.4)           | 1 (0.5)                    | 37 (17.5)          | 5 (2.4)          | 4 (1.9)            | 17 (8.1)           | 140 (66.4)         | 3 (1.4)              |
| Arkansas             | 70          | 0 (0.0)             | 0 (0.0)         | 6 (8.6)                       | 5 (7.1)                 | 0 (0.0)           | 0 (0.0)                    | 3 (4.3)            | 0 (0.0)          | 1 (1.4)            | 9 (12.9)           | 47 (67.1)          | 1 (1.4)              |
| California           | 2191        | 4 (0.2)             | 1 (0.0)         | 83 (3.8)                      | 38 (1.7)                | 15 (0.7)          | 12 (0.5)                   | 455 (20.8)         | 75 (3.4)         | 101 (4.6)          | 590 (26.9)         | 995 (45.4)         | 53 (2.4)             |
| Colorado             | 64          | 0 (0.0)             | 3 (4.7)         | 6 (9.4)                       | 3 (4.7)                 | 1 (1.6)           | 0 (0.0)                    | 11 (17.2)          | 3 (4.7)          | 3 (4.7)            | 0 (0.0)            | 37 (57.8)          | 1 (1.6)              |
| Connecticut          | 74          | 0 (0.0)             | 0 (0.0)         | 1 (1.4)                       | 0 (0.0)                 | 0 (0.0)           | 0 (0.0)                    | 6 (8.1)            | 0 (0.0)          | 1 (1.4)            | 15 (20.3)          | 51 (68.9)          | 0 (0.0)              |
| Delaware             | 28          | 0 (0.0)             | 0 (0.0)         | 1 (3.6)                       | 1 (3.6)                 | 0 (0.0)           | 0 (0.0)                    | 1 (3.6)            | 0 (0.0)          | 3 (10.7)           | 21 (75.0)          | 4 (14.3)           | 0 (0.0)              |
| District of Columbia | 37          | 0 (0.0)             | 0 (0.0)         | 0 (0.0)                       | 1 (2.7)                 | 0 (0.0)           | 0 (0.0)                    | 0 (0.0)            | 0 (0.0)          | 2 (5.4)            | 0 (0.0)            | 30 (81.1)          | 4 (10.8)             |
| Florida              | 679         | 0 (0.0)             | 7 (1.0)         | 83 (12.2)                     | 11 (1.6)                | 0 (0.0)           | 1 (0.1)                    | 79 (11.6)          | 10 (1.5)         | 54 (8.0)           | 186 (27.4)         | 288 (42.4)         | 0 (0.0)              |
| Georgia              | 357         | 0 (0.0)             | 2 (0.6)         | 61 (17.1)                     | 13 (3.6)                | 0 (0.0)           | 0 (0.0)                    | 35 (9.8)           | 5 (1.4)          | 9 (2.5)            | 60 (16.8)          | 207 (58.0)         | 5 (1.4)              |
| Hawaii               | 117         | 1 (0.9)             | 0 (0.0)         | 5 (4.3)                       | 4 (3.4)                 | 1 (0.9)           | 1 (0.9)                    | 36 (30.8)          | 3 (2.6)          | 5 (4.3)            | 12 (10.3)          | 57 (48.7)          | 0 (0.0)              |
| Idaho                | 15          | 0 (0.0)             | 0 (0.0)         | 4 (26.7)                      | 0 (0.0)                 | 0 (0.0)           | 0 (0.0)                    | 1 (6.7)            | 1 (6.7)          | 1 (6.7)            | 6 (40.0)           | 3 (20.0)           | 1 (6.7)              |
| Illinois             | 347         | 0 (0.0)             | 1 (0.3)         | 43 (12.4)                     | 9 (2.6)                 | 0 (0.0)           | 1 (0.3)                    | 46 (13.3)          | 5 (1.4)          | 19 (5.5)           | 21 (6.1)           | 189 (54.5)         | 28 (8.1)             |
| Indiana              | 102         | 0 (0.0)             | 1 (1.0)         | 12 (11.8)                     | 7 (6.9)                 | 0 (0.0)           | 1 (1.0)                    | 10 (9.8)           | 2 (2.0)          | 3 (2.9)            | 12 (11.8)          | 57 (55.9)          | 1 (1.0)              |
| Iowa                 | 46          | 0 (0.0)             | 2 (4.3)         | 2 (4.3)                       | 6 (13.0)                | 3 (6.5)           | 0 (0.0)                    | 1 (2.2)            | 0 (0.0)          | 2 (4.3)            | 5 (10.9)           | 15 (32.6)          | 12 (26.1)            |
| Kansas               | 42          | 0 (0.0)             | 0 (0.0)         | 4 (9.5)                       | 1 (2.4)                 | 0 (0.0)           | 0 (0.0)                    | 7 (16.7)           | 1 (2.4)          | 1 (2.4)            | 1 (2.4)            | 27 (64.3)          | 1 (2.4)              |
| Kentucky             | 80          | 0 (0.0)             | 1 (1.3)         | 7 (8.8)                       | 8 (10.0)                | 0 (0.0)           | 0 (0.0)                    | 11 (13.8)          | 3 (3.8)          | 5 (6.3)            | 15 (18.8)          | 42 (52.5)          | 0 (0.0)              |
| Louisiana            | 149         | 0 (0.0)             | 4 (2.7)         | 6 (4.0)                       | 1 (0.7)                 | 0 (0.0)           | 0 (0.0)                    | 24 (16.1)          | 5 (3.4)          | 11 (7.4)           | 20 (13.4)          | 86 (57.7)          | 7 (4.7)              |
| Maine                | 17          | 0 (0.0)             | 0 (0.0)         | 0 (0.0)                       | 1 (5.9)                 | 0 (0.0)           | 0 (0.0)                    | 1 (5.9)            | 1 (5.9)          | 3 (17.6)           | 1 (5.9)            | 10 (58.8)          | 0 (0.0)              |
| Maryland             | 224         | 0 (0.0)             | 2 (0.9)         | 18 (8.0)                      | 2 (0.9)                 | 2 (0.9)           | 3 (1.3)                    | 25 (11.2)          | 6 (2.7)          | 10 (4.5)           | 24 (10.7)          | 140 (62.5)         | 4 (1.8)              |
| Massachusetts        | 215         | 1 (0.5)             | 0 (0.0)         | 5 (2.3)                       | 2 (0.9)                 | 0 (0.0)           | 0 (0.0)                    | 13 (6.0)           | 5 (2.3)          | 0 (0.0)            | 76 (35.3)          | 121 (56.3)         | 3 (1.4)              |
| Michigan             | 149         | 1 (0.7)             | 2 (1.3)         | 18 (12.1)                     | 1 (0.7)                 | 2 (1.3)           | 0 (0.0)                    | 23 (15.4)          | 4 (2.7)          | 12 (8.1)           | 29 (19.5)          | 0 (0.0)            | 77 (51.7)            |
| Minnesota            | 162         | 0 (0.0)             | 0 (0.0)         | 16 (9.9)                      | 10 (6.2)                | 0 (0.0)           | 1 (0.6)                    | 11 (6.8)           | 1 (0.6)          | 6 (3.7)            | 47 (29.0)          | 78 (48.1)          | 5 (3.1)              |
| Mississippi          | 81          | 0 (0.0)             | 1 (1.2)         | 7 (8.6)                       | 2 (2.5)                 | 0 (0.0)           | 0 (0.0)                    | 11 (13.6)          | 0 (0.0)          | 2 (2.5)            | 72 (88.9)          | 7 (8.6)            | 0 (0.0)              |
| Missouri             | 89          | 0 (0.0)             | 0 (0.0)         | 0 (0.0)                       | 0 (0.0)                 | 0 (0.0)           | 0 (0.0)                    | 0 (0.0)            | 0 (0.0)          | 0 (0.0)            | 0 (0.0)            | 0 (0.0)            | 89 (100.0)           |
| Montana              | 5           | 0 (0.0)             | 0 (0.0)         | 0 (0.0)                       | 0 (0.0)                 | 0 (0.0)           | 0 (0.0)                    | 1 (20.0)           | 1 (20.0)         | 0 (0.0)            | 3 (60.0)           | 2 (40.0)           | 0 (0.0)              |
| Nebraska             | 22          | 0 (0.0)             | 0 (0.0)         | 3 (13.6)                      | 1 (4.5)                 | 0 (0.0)           | 0 (0.0)                    | 1 (4.5)            | 0 (0.0)          | 2 (9.1)            | 12 (54.5)          | 2 (9.1)            | 2 (9.1)              |
| Nevada               | 82          | 0 (0.0)             | 1 (1.2)         | 9 (11.0)                      | 1 (1.2)                 | 0 (0.0)           | 0 (0.0)                    | 14 (17.1)          | 3 (3.7)          | 2 (2.4)            | 4 (4.9)            | 40 (48.8)          | 11 (13.4)            |
| New Hampshire        | 9           | 0 (0.0)             | 0 (0.0)         | 2 (22.2)                      | 1 (11.1)                | 0 (0.0)           | 0 (0.0)                    | 1 (11.1)           | 0 (0.0)          | 1 (11.1)           | 4 (44.4)           | 0 (0.0)            |                      |
| New Jersey           | 302         | 0 (0.0)             | 0 (0.0)         | 6 (2.0)                       | 1 (0.3)                 | 4 (1.3)           | 2 (0.7)                    | 40 (13.2)          | 6 (2.0)          | 10 (3.3)           | 44 (14.6)          | 205 (67.9)         | 0 (0.0)              |
| New Mexico           | 40          | 0 (0.0)             | 0 (0.0)         | 0 (0.0)                       | 2 (5.0)                 | 0 (0.0)           | 0 (0.0)                    | 13 (32.5)          | 0 (0.0)          | 0 (0.0)            | 7 (17.5)           | 19 (47.5)          | 0 (0.0)              |

**Table 40. (Con't) Tuberculosis Risk Factors<sup>1</sup>: Reporting Areas, 2012**

| Reporting Area                         | Total | MDR Patient Contact | Misseed Contact | Infectious TB Patient Contact | Incomplete LTBI therapy | TNF-Alpha Therapy | Post-organ Transplantation | Diabetes Mellitus | Renal Disease | Immuno-suppression | Other      | None       | Missing <sup>2</sup> |
|----------------------------------------|-------|---------------------|-----------------|-------------------------------|-------------------------|-------------------|----------------------------|-------------------|---------------|--------------------|------------|------------|----------------------|
|                                        |       | No. (%)             | No. (%)         | No. (%)                       | No. (%)                 | No. (%)           | No. (%)                    | No. (%)           | No. (%)       | No. (%)            | No. (%)    | No. (%)    | No. (%)              |
| New York State <sup>3</sup>            | 215   | 0 (0.0)             | 0 (0.0)         | 8 (3.7)                       | 13 (6.0)                | 2 (0.9)           | 1 (0.5)                    | 21 (9.8)          | 3 (1.4)       | 13 (6.0)           | 36 (16.7)  | 124 (57.7) | 3 (1.4)              |
| New York City                          | 651   | 0 (0.0)             | 1 (0.2)         | 25 (3.8)                      | 5 (0.8)                 | 0 (0.0)           | 3 (0.5)                    | 92 (14.1)         | 9 (1.4)       | 27 (4.1)           | 77 (11.8)  | 424 (65.1) | 9 (1.4)              |
| North Carolina                         | 211   | 0 (0.0)             | 2 (0.9)         | 28 (13.3)                     | 21 (10.0)               | 2 (0.9)           | 3 (1.4)                    | 30 (14.2)         | 7 (3.3)       | 17 (8.1)           | 41 (19.4)  | 113 (53.6) | 18 (8.5)             |
| North Dakota                           | 26    | 0 (0.0)             | 1 (3.8)         | 18 (69.2)                     | 0 (0.0)                 | 0 (0.0)           | 0 (0.0)                    | 0 (0.0)           | 0 (0.0)       | 0 (0.0)            | 2 (0.0)    | 2 (7.7)    | 7 (26.9)             |
| Ohio                                   | 149   | 0 (0.0)             | 0 (0.0)         | 11 (7.4)                      | 10 (6.7)                | 2 (1.3)           | 2 (1.3)                    | 17 (11.4)         | 2 (1.3)       | 7 (4.7)            | 18 (12.1)  | 87 (58.4)  | 0 (0.0)              |
| Oklahoma                               | 88    | 1 (1.1)             | 1 (1.1)         | 18 (20.5)                     | 4 (4.5)                 | 0 (0.0)           | 0 (0.0)                    | 12 (13.6)         | 3 (3.4)       | 1 (1.1)            | 14 (15.9)  | 47 (53.4)  | 0 (0.0)              |
| Oregon                                 | 61    | 0 (0.0)             | 0 (0.0)         | 2 (3.3)                       | 2 (3.3)                 | 0 (0.0)           | 0 (0.0)                    | 8 (13.1)          | 1 (1.6)       | 1 (1.6)            | 5 (8.2)    | 47 (77.0)  | 0 (0.0)              |
| Pennsylvania                           | 234   | 0 (0.0)             | 2 (0.9)         | 10 (4.3)                      | 13 (5.6)                | 2 (0.9)           | 4 (1.7)                    | 25 (10.7)         | 7 (3.0)       | 15 (6.4)           | 48 (20.5)  | 115 (49.1) | 16 (6.8)             |
| Rhode Island                           | 23    | 0 (0.0)             | 0 (0.0)         | 4 (17.4)                      | 1 (4.3)                 | 1 (4.3)           | 0 (0.0)                    | 5 (21.7)          | 1 (4.3)       | 0 (0.0)            | 2 (8.7)    | 11 (47.8)  | 0 (0.0)              |
| South Carolina                         | 122   | 0 (0.0)             | 2 (1.6)         | 14 (11.5)                     | 2 (11.6)                | 0 (0.0)           | 0 (0.0)                    | 11 (9.0)          | 1 (0.8)       | 6 (4.9)            | 14 (11.5)  | 74 (60.7)  | 0 (0.0)              |
| South Dakota                           | 19    | 0 (0.0)             | 0 (0.0)         | 3 (15.8)                      | 2 (10.5)                | 0 (0.0)           | 0 (0.0)                    | 5 (26.3)          | 3 (15.8)      | 1 (5.3)            | 1 (5.3)    | 7 (36.8)   | 1 (5.3)              |
| Tennessee                              | 164   | 0 (0.0)             | 0 (0.0)         | 17 (10.4)                     | 9 (5.5)                 | 1 (0.6)           | 2 (1.2)                    | 13 (7.9)          | 2 (1.2)       | 8 (4.9)            | 15 (9.1)   | 100 (61.0) | 0 (0.0)              |
| Texas                                  | 1233  | 5 (0.4)             | 1 (0.1)         | 102 (8.3)                     | 15 (1.2)                | 3 (0.2)           | 4 (0.3)                    | 180 (14.6)        | 22 (1.8)      | 18 (1.5)           | 497 (40.3) | 508 (41.2) | 1 (0.1)              |
| Utah                                   | 37    | 0 (0.0)             | 0 (0.0)         | 0 (0.0)                       | 1 (2.7)                 | 1 (2.7)           | 0 (0.0)                    | 7 (18.9)          | 1 (2.7)       | 3 (8.1)            | 3 (8.1)    | 22 (59.5)  | 0 (0.0)              |
| Vermont                                | 4     | 0 (0.0)             | 0 (0.0)         | 0 (0.0)                       | 1 (25.0)                | 0 (0.0)           | 1 (25.0)                   | 0 (0.0)           | 1 (25.0)      | 1 (25.0)           | 4 (100.0)  | 0 (0.0)    | 0 (0.0)              |
| Virginia                               | 235   | 1 (0.4)             | 2 (0.9)         | 12 (5.1)                      | 5 (2.1)                 | 3 (1.3)           | 1 (0.4)                    | 26 (11.1)         | 3 (1.3)       | 9 (3.8)            | 43 (18.3)  | 140 (59.6) | 1 (0.4)              |
| Washington                             | 185   | 0 (0.0)             | 0 (0.0)         | 11 (5.9)                      | 4 (2.2)                 | 0 (0.0)           | 2 (1.1)                    | 45 (24.3)         | 7 (3.8)       | 10 (5.4)           | 31 (16.8)  | 89 (48.1)  | 11 (5.9)             |
| West Virginia                          | 8     | 0 (0.0)             | 1 (12.5)        | 1 (12.5)                      | 2 (25.0)                | 0 (0.0)           | 0 (0.0)                    | 1 (12.5)          | 0 (0.0)       | 0 (0.0)            | 2 (25.0)   | 2 (25.0)   | 0 (0.0)              |
| Wisconsin                              | 71    | 0 (0.0)             | 1 (1.4)         | 11 (15.5)                     | 8 (11.3)                | 3 (4.2)           | 0 (0.0)                    | 4 (5.6)           | 2 (2.8)       | 0 (0.0)            | 30 (42.3)  | 17 (23.9)  | 2 (2.8)              |
| Wyoming                                | 3     | 0 (0.0)             | 0 (0.0)         | 0 (0.0)                       | 0 (0.0)                 | 0 (0.0)           | 0 (0.0)                    | 1 (33.3)          | 0 (0.0)       | 0 (0.0)            | 0 (0.0)    | 2 (66.7)   | 0 (0.0)              |
| American Samoa <sup>4</sup>            | 1     | 0 (0.0)             | 0 (0.0)         | 0 (0.0)                       | 0 (0.0)                 | 0 (0.0)           | 0 (0.0)                    | 0 (0.0)           | 0 (0.0)       | 0 (0.0)            | 0 (0.0)    | 1 (100.0)  | 0 (0.0)              |
| Fed. States of Micronesia <sup>4</sup> | 173   | 10 (5.8)            | 1 (0.6)         | 116 (67.1)                    | 1 (0.6)                 | 0 (0.0)           | 0 (0.0)                    | 5 (2.9)           | 0 (0.0)       | 0 (0.0)            | 26 (15.0)  | 16 (9.2)   | 2 (1.2)              |
| Guam <sup>4</sup>                      | 68    | 0 (0.0)             | 0 (0.0)         | 6 (8.8)                       | 0 (0.0)                 | 0 (0.0)           | 0 (0.0)                    | 1 (1.5)           | 2 (2.9)       | 0 (0.0)            | 9 (13.2)   | 46 (67.6)  | 4 (5.9)              |
| Micronesia Islands <sup>4</sup>        | 145   | 2 (1.4)             | 0 (0.0)         | 40 (27.6)                     | 0 (0.0)                 | 0 (0.0)           | 0 (0.0)                    | 38 (26.2)         | 0 (0.0)       | 0 (0.0)            | 6 (4.1)    | 67 (46.2)  | 5 (3.4)              |
| N. Mariana Islands <sup>4</sup>        | 21    | 0 (0.0)             | 0 (0.0)         | 1 (4.8)                       | 1 (4.8)                 | 0 (0.0)           | 0 (0.0)                    | 8 (38.1)          | 0 (0.0)       | 0 (0.0)            | 1 (4.8)    | 10 (47.6)  | 0 (0.0)              |
| Puerto Rico <sup>4</sup>               | 71    | 0 (0.0)             | 0 (0.0)         | 4 (5.6)                       | 0 (0.0)                 | 0 (0.0)           | 0 (0.0)                    | 11 (15.5)         | 0 (0.0)       | 0 (0.0)            | 8 (11.3)   | 48 (67.6)  | 0 (0.0)              |
| Republic of Palau <sup>4</sup>         | 4     | 0 (0.0)             | 0 (0.0)         | 0 (0.0)                       | 0 (0.0)                 | 0 (0.0)           | 0 (0.0)                    | 3 (75.0)          | 0 (0.0)       | 0 (0.0)            | 0 (0.0)    | 1 (25.0)   | 0 (0.0)              |
| U.S. Virgin Islands <sup>4</sup>       | 4     | 0 (0.0)             | 0 (0.0)         | 0 (0.0)                       | 0 (0.0)                 | 0 (0.0)           | 0 (0.0)                    | 0 (0.0)           | 0 (0.0)       | 0 (0.0)            | 1 (25.0)   | 0 (0.0)    | 3 (75.0)             |

<sup>1</sup>Includes the number of risk factors reported (which may be more than one per case) and the number of cases with no information on additional risk factors. The sum of risk factors is greater than the total number of cases because more than one risk factor may be selected per case.

<sup>2</sup>None of the options for additional risk factors was selected.

<sup>3</sup>Excludes New York City

<sup>4</sup>Not included in U.S. totals.

**Table 41. Primary Reasons for Tuberculosis Evaluation<sup>1</sup>: Reporting Areas, 2012**

| Reporting Area       | Total       | TB              | Abnormal Chest | Contact     | Targeted      | Health Care | Administrative | Immigrant Medical | Incidental Lab | Result    | Unknown/<br>Missing |
|----------------------|-------------|-----------------|----------------|-------------|---------------|-------------|----------------|-------------------|----------------|-----------|---------------------|
|                      |             | Symptoms<br>No. | (%)            | No.         | (%)           | No.         | (%)            | No.               | (%)            | No.       | (%)                 |
| <b>United States</b> | <b>9945</b> | <b>5737</b>     | <b>(57.7)</b>  | <b>2016</b> | <b>(20.3)</b> | <b>400</b>  | <b>(4.0)</b>   | <b>352</b>        | <b>(3.5)</b>   | <b>43</b> | <b>(0.4)</b>        |
| Alabama              | 134         | 55              | (41.0)         | 52          | (38.8)        | 8           | (6.0)          | 1                 | (0.7)          | 0         | (0.0)               |
| Alaska               | 66          | 26              | (39.4)         | 7           | (10.6)        | 15          | (22.7)         | 8                 | (12.1)         | 1         | (1.5)               |
| Arizona              | 211         | 76              | (36.0)         | 44          | (20.9)        | 2           | (0.9)          | 49                | (23.2)         | 1         | (0.5)               |
| Arkansas             | 70          | 22              | (31.4)         | 31          | (44.3)        | 3           | (4.3)          | 0                 | (0.0)          | 1         | (1.4)               |
| California           | 2191        | 1414            | (64.5)         | 384         | (17.5)        | 65          | (3.0)          | 52                | (2.4)          | 6         | (0.3)               |
| Colorado             | 64          | 46              | (71.9)         | 5           | (7.8)         | 2           | (3.1)          | 6                 | (9.4)          | 0         | (0.0)               |
| Connecticut          | 74          | 49              | (66.2)         | 11          | (14.9)        | 1           | (1.4)          | 5                 | (6.8)          | 0         | (0.0)               |
| Delaware             | 28          | 16              | (57.1)         | 8           | (28.6)        | 0           | (0.0)          | 0                 | (0.0)          | 1         | (3.6)               |
| District of Columbia | 37          | 34              | (91.9)         | 2           | (5.4)         | 0           | (0.0)          | 0                 | (0.0)          | 0         | (0.0)               |
| Florida              | 679         | 278             | (40.9)         | 233         | (34.3)        | 11          | (1.6)          | 7                 | (1.0)          | 1         | (0.1)               |
| Georgia              | 357         | 214             | (59.9)         | 62          | (17.4)        | 28          | (7.8)          | 17                | (4.8)          | 0         | (0.0)               |
| Hawaii               | 117         | 65              | (55.6)         | 18          | (15.4)        | 2           | (1.7)          | 1                 | (0.9)          | 2         | (1.7)               |
| Idaho                | 15          | 9               | (60.0)         | 3           | (20.0)        | 1           | (6.7)          | 1                 | (6.7)          | 0         | (0.0)               |
| Illinois             | 347         | 215             | (62.0)         | 71          | (20.5)        | 6           | (1.7)          | 5                 | (1.4)          | 1         | (0.3)               |
| Indiana              | 102         | 57              | (55.9)         | 21          | (20.6)        | 8           | (7.8)          | 5                 | (4.9)          | 1         | (1.0)               |
| Iowa                 | 46          | 33              | (71.7)         | 4           | (8.7)         | 2           | (4.3)          | 0                 | (0.0)          | 0         | (0.0)               |
| Kansas               | 42          | 19              | (45.2)         | 5           | (11.9)        | 3           | (7.1)          | 2                 | (4.8)          | 0         | (0.0)               |
| Kentucky             | 80          | 32              | (40.0)         | 29          | (36.3)        | 3           | (3.8)          | 0                 | (0.0)          | 0         | (0.0)               |
| Louisiana            | 149         | 83              | (55.7)         | 17          | (11.4)        | 8           | (5.4)          | 2                 | (1.3)          | 0         | (0.0)               |
| Maine                | 17          | 12              | (70.6)         | 2           | (11.8)        | 0           | (0.0)          | 0                 | (0.0)          | 0         | (0.0)               |
| Maryland             | 224         | 117             | (52.2)         | 66          | (29.5)        | 7           | (3.1)          | 6                 | (2.7)          | 0         | (0.0)               |
| Massachusetts        | 215         | 160             | (74.4)         | 36          | (16.7)        | 2           | (0.9)          | 1                 | (0.5)          | 2         | (0.9)               |
| Michigan             | 149         | 73              | (49.0)         | 47          | (31.5)        | 3           | (2.0)          | 1                 | (0.7)          | 0         | (0.0)               |
| Minnesota            | 162         | 128             | (79.0)         | 4           | (2.5)         | 10          | (6.2)          | 4                 | (2.5)          | 0         | (0.0)               |
| Mississippi          | 81          | 43              | (53.1)         | 18          | (22.2)        | 5           | (6.2)          | 3                 | (3.7)          | 0         | (0.0)               |
| Missouri             | 89          | 73              | (82.0)         | 6           | (6.7)         | 2           | (2.2)          | 0                 | (0.0)          | 0         | (0.0)               |
| Montana              | 5           | 3               | (60.0)         | 2           | (40.0)        | 0           | (0.0)          | 0                 | (0.0)          | 0         | (0.0)               |
| Nebraska             | 22          | 19              | (86.4)         | 2           | (9.1)         | 1           | (4.5)          | 0                 | (0.0)          | 0         | (0.0)               |
| Nevada               | 82          | 21              | (25.6)         | 36          | (43.9)        | 6           | (7.3)          | 0                 | (0.0)          | 2         | (2.4)               |
| New Hampshire        | 9           | 6               | (66.7)         | 1           | (11.1)        | 0           | (0.0)          | 1                 | (11.1)         | 0         | (0.0)               |
| New Jersey           | 302         | 170             | (56.3)         | 65          | (21.5)        | 4           | (1.3)          | 1                 | (0.3)          | 2         | (0.7)               |
| New Mexico           | 40          | 31              | (77.5)         | 8           | (20.0)        | 1           | (2.5)          | 0                 | (0.0)          | 0         | (0.0)               |

**Table 41. (Con't) Primary Reasons for Tuberculosis Evaluation<sup>1</sup>: Reporting Areas, 2012**

| Reporting Area                         | Total | TB Symptoms |         | Abnormal Chest Radiograph |        | Contact Investigation |        | Targeted Testing |        | Health Care Worker |       | Administrative Testing |       | Immigrant Medical Exam |        | Incidental Lab Result |        | Unknown/Missing |       |
|----------------------------------------|-------|-------------|---------|---------------------------|--------|-----------------------|--------|------------------|--------|--------------------|-------|------------------------|-------|------------------------|--------|-----------------------|--------|-----------------|-------|
|                                        |       | No.         | (%)     | No.                       | (%)    | No.                   | (%)    | No.              | (%)    | No.                | (%)   | No.                    | (%)   | No.                    | (%)    | No.                   | (%)    | No.             | (%)   |
| New York State <sup>2</sup>            | 215   | 103         | (47.9)  | 53                        | (24.7) | 4                     | (1.9)  | 2                | (0.9)  | 1                  | (0.5) | 1                      | (0.5) | 3                      | (1.4)  | 35                    | (16.3) | 13              | (6.0) |
| New York City                          | 651   | 352         | (54.1)  | 138                       | (21.2) | 15                    | (2.3)  | 9                | (1.4)  | 1                  | (0.2) | 6                      | (0.9) | 8                      | (1.2)  | 117                   | (18.0) | 5               | (0.8) |
| North Carolina                         | 211   | 65          | (30.8)  | 74                        | (35.1) | 14                    | (6.6)  | 1                | (0.5)  | 1                  | (0.5) | 3                      | (1.4) | 5                      | (2.4)  | 48                    | (22.7) | 0               | (0.0) |
| North Dakota                           | 26    | 9           | (34.6)  | 1                         | (3.8)  | 11                    | (42.3) | 0                | (0.0)  | 2                  | (7.7) | 0                      | (0.0) | 0                      | (0.0)  | 2                     | (7.7)  | 1               | (3.8) |
| Ohio                                   | 149   | 92          | (61.7)  | 27                        | (18.1) | 5                     | (3.4)  | 4                | (2.7)  | 1                  | (0.7) | 1                      | (0.7) | 4                      | (2.7)  | 15                    | (10.1) | 0               | (0.0) |
| Oklahoma                               | 88    | 39          | (44.3)  | 17                        | (19.3) | 7                     | (8.0)  | 3                | (3.4)  | 1                  | (1.1) | 1                      | (1.1) | 6                      | (6.8)  | 14                    | (15.9) | 0               | (0.0) |
| Oregon                                 | 61    | 53          | (86.9)  | 2                         | (3.3)  | 1                     | (1.6)  | 3                | (4.9)  | 0                  | (0.0) | 0                      | (0.0) | 1                      | (1.6)  | 1                     | (1.6)  | 0               | (0.0) |
| Pennsylvania                           | 234   | 140         | (59.8)  | 44                        | (18.8) | 7                     | (3.0)  | 7                | (3.0)  | 1                  | (0.4) | 1                      | (0.4) | 7                      | (3.0)  | 25                    | (10.7) | 2               | (0.9) |
| Rhode Island                           | 23    | 13          | (56.5)  | 7                         | (30.4) | 2                     | (8.7)  | 0                | (0.0)  | 0                  | (0.0) | 0                      | (0.0) | 0                      | (0.0)  | 1                     | (4.3)  | 0               | (0.0) |
| South Carolina                         | 122   | 46          | (37.7)  | 43                        | (35.2) | 7                     | (5.7)  | 1                | (0.8)  | 1                  | (0.8) | 0                      | (0.0) | 1                      | (0.8)  | 23                    | (18.9) | 0               | (0.0) |
| South Dakota                           | 19    | 7           | (36.8)  | 7                         | (36.8) | 0                     | (0.0)  | 0                | (0.0)  | 0                  | (0.0) | 0                      | (0.0) | 0                      | (0.0)  | 5                     | (26.3) | 0               | (0.0) |
| Tennessee                              | 164   | 78          | (47.6)  | 60                        | (36.6) | 8                     | (4.9)  | 1                | (0.6)  | 0                  | (0.0) | 0                      | (0.0) | 0                      | (0.0)  | 17                    | (10.4) | 0               | (0.0) |
| Texas                                  | 1233  | 761         | (61.7)  | 162                       | (13.1) | 91                    | (7.4)  | 139              | (11.3) | 14                 | (1.1) | 2                      | (0.2) | 9                      | (0.7)  | 53                    | (4.3)  | 2               | (0.2) |
| Utah                                   | 37    | 27          | (73.0)  | 4                         | (10.8) | 0                     | (0.0)  | 0                | (0.0)  | 0                  | (0.0) | 0                      | (0.0) | 2                      | (5.4)  | 4                     | (10.8) | 0               | (0.0) |
| Vermont                                | 4     | 3           | (75.0)  | 0                         | (0.0)  | 0                     | (0.0)  | 0                | (0.0)  | 0                  | (0.0) | 0                      | (0.0) | 1                      | (25.0) | 0                     | (0.0)  | 0               | (0.0) |
| Virginia                               | 235   | 178         | (75.7)  | 28                        | (11.9) | 6                     | (2.6)  | 2                | (0.9)  | 0                  | (0.0) | 5                      | (2.1) | 1                      | (0.4)  | 13                    | (5.5)  | 2               | (0.9) |
| Washington                             | 185   | 127         | (68.6)  | 30                        | (16.2) | 7                     | (3.8)  | 1                | (0.5)  | 0                  | (0.0) | 0                      | (0.0) | 1                      | (0.5)  | 14                    | (7.6)  | 5               | (2.7) |
| West Virginia                          | 8     | 3           | (37.5)  | 4                         | (50.0) | 0                     | (0.0)  | 1                | (12.5) | 0                  | (0.0) | 0                      | (0.0) | 0                      | (0.0)  | 0                     | (0.0)  | 0               | (0.0) |
| Wisconsin                              | 71    | 40          | (56.3)  | 15                        | (21.1) | 6                     | (8.5)  | 0                | (0.0)  | 0                  | (0.0) | 0                      | (0.0) | 2                      | (2.8)  | 7                     | (9.9)  | 1               | (1.4) |
| Wyoming                                | 3     | 2           | (66.7)  | 0                         | (0.0)  | 0                     | (0.0)  | 0                | (0.0)  | 0                  | (0.0) | 0                      | (0.0) | 0                      | (0.0)  | 1                     | (33.3) | 0               | (0.0) |
| American Samoa <sup>3</sup>            | 1     | 1           | (100.0) | 0                         | (0.0)  | 0                     | (0.0)  | 0                | (0.0)  | 0                  | (0.0) | 0                      | (0.0) | 0                      | (0.0)  | 0                     | (0.0)  | 0               | (0.0) |
| Fed. States of Micronesia <sup>3</sup> | 173   | 117         | (67.6)  | 16                        | (9.2)  | 31                    | (17.9) | 1                | (0.6)  | 1                  | (0.6) | 0                      | (0.0) | 4                      | (2.3)  | 2                     | (1.2)  |                 |       |
| Guam <sup>3</sup>                      | 68    | 29          | (42.6)  | 20                        | (29.4) | 5                     | (7.4)  | 0                | (0.0)  | 0                  | (0.0) | 5                      | (7.4) | 9                      | (13.2) | 0                     | (0.0)  |                 |       |
| Marshall Islands <sup>3</sup>          | 145   | 124         | (85.5)  | 6                         | (4.1)  | 11                    | (7.6)  | 2                | (1.4)  | 0                  | (0.0) | 0                      | (0.0) | 2                      | (1.4)  | 0                     | (0.0)  |                 |       |
| N. Mariana Islands <sup>3</sup>        | 21    | 14          | (66.7)  | 3                         | (14.3) | 1                     | (4.8)  | 0                | (0.0)  | 0                  | (0.0) | 2                      | (9.5) | 0                      | (0.0)  | 1                     | (4.8)  |                 |       |
| Puerto Rico <sup>3</sup>               | 71    | 34          | (47.9)  | 28                        | (39.4) | 4                     | (5.6)  | 0                | (0.0)  | 0                  | (0.0) | 1                      | (1.4) | 4                      | (5.6)  | 0                     | (0.0)  |                 |       |
| Republic of Palau <sup>3</sup>         | 4     | 4           | (100.0) | 0                         | (0.0)  | 0                     | (0.0)  | 0                | (0.0)  | 0                  | (0.0) | 0                      | (0.0) | 0                      | (0.0)  | 0                     | (0.0)  |                 |       |
| U.S. Virgin Islands <sup>3</sup>       | 4     | 1           | (25.0)  | 0                         | (0.0)  | 0                     | (0.0)  | 0                | (0.0)  | 0                  | (0.0) | 0                      | (0.0) | 3                      | (75.0) | 0                     | (0.0)  |                 |       |

<sup>1</sup>Each TB patient has only one primary reason for TB evaluation.

<sup>2</sup>Excludes New York City.

<sup>3</sup>Not included in U.S. totals.

**Table 42. Tuberculosis Cases and Percentages by Residence in and Type of Correctional Facilities,<sup>1</sup> Age ≥ 15: Reporting Areas, 2012**

| Reporting Area                         | Total Cases | Cases with Information on Residence in Correctional Facilities |               | Cases Reported As Residents of Correctional Facilities <sup>2</sup> |              |
|----------------------------------------|-------------|----------------------------------------------------------------|---------------|---------------------------------------------------------------------|--------------|
|                                        |             | No.                                                            | (%)           | No.                                                                 | (%)          |
| <b>United States</b>                   | <b>9456</b> | <b>9407</b>                                                    | <b>(99.5)</b> | <b>384</b>                                                          | <b>(4.1)</b> |
| Alabama                                | 130         | 130                                                            | (100.0)       | 10                                                                  | (7.7)        |
| Alaska                                 | 57          | 52                                                             | (91.2)        | 4                                                                   | (7.7)        |
| Arizona                                | 201         | 201                                                            | (100.0)       | 55                                                                  | (27.4)       |
| Arkansas                               | 67          | 67                                                             | (100.0)       | 0                                                                   | 0.0          |
| California                             | 2102        | 2093                                                           | (99.6)        | 57                                                                  | (2.7)        |
| Colorado                               | 61          | 61                                                             | (100.0)       | 2                                                                   | (3.3)        |
| Connecticut                            | 73          | 73                                                             | (100.0)       | 0                                                                   | 0.0          |
| Delaware                               | 28          | 28                                                             | (100.0)       | 0                                                                   | 0.0          |
| District of Columbia                   | 35          | 35                                                             | (100.0)       | 1                                                                   | (2.9)        |
| Florida                                | 649         | 649                                                            | (100.0)       | 24                                                                  | (3.7)        |
| Georgia                                | 334         | 333                                                            | (99.7)        | 19                                                                  | (5.7)        |
| Hawaii                                 | 113         | 113                                                            | (100.0)       | 0                                                                   | 0.0          |
| Idaho                                  | 14          | 14                                                             | (100.0)       | 1                                                                   | (7.1)        |
| Illinois                               | 331         | 330                                                            | (99.7)        | 6                                                                   | (1.8)        |
| Indiana                                | 92          | 90                                                             | (97.8)        | 3                                                                   | (3.3)        |
| Iowa                                   | 44          | 43                                                             | (97.7)        | 0                                                                   | 0.0          |
| Kansas                                 | 40          | 40                                                             | (100.0)       | 1                                                                   | (2.5)        |
| Kentucky                               | 77          | 77                                                             | (100.0)       | 7                                                                   | (9.1)        |
| Louisiana                              | 145         | 141                                                            | (97.2)        | 5                                                                   | (3.5)        |
| Maine                                  | 15          | 15                                                             | (100.0)       | 0                                                                   | 0.0          |
| Maryland                               | 210         | 210                                                            | (100.0)       | 1                                                                   | (0.5)        |
| Massachusetts                          | 213         | 212                                                            | (99.5)        | 5                                                                   | (2.4)        |
| Michigan                               | 146         | 143                                                            | (97.9)        | 2                                                                   | (1.4)        |
| Minnesota                              | 139         | 139                                                            | (100.0)       | 0                                                                   | 0.0          |
| Mississippi                            | 80          | 80                                                             | (100.0)       | 3                                                                   | (3.8)        |
| Missouri                               | 85          | 78                                                             | (91.8)        | 3                                                                   | (3.8)        |
| Montana                                | 5           | 5                                                              | (100.0)       | 0                                                                   | 0.0          |
| Nebraska                               | 21          | 21                                                             | (100.0)       | 1                                                                   | (4.8)        |
| Nevada                                 | 72          | 72                                                             | (100.0)       | 2                                                                   | (2.8)        |
| New Hampshire                          | 8           | 8                                                              | (100.0)       | 0                                                                   | 0.0          |
| New Jersey                             | 297         | 297                                                            | (100.0)       | 2                                                                   | (0.7)        |
| New Mexico                             | 40          | 40                                                             | (100.0)       | 2                                                                   | (5.0)        |
| New York State <sup>5</sup>            | 203         | 202                                                            | (99.5)        | 0                                                                   | 0.0          |
| New York City                          | 636         | 629                                                            | (98.9)        | 8                                                                   | (1.3)        |
| North Carolina                         | 196         | 196                                                            | (100.0)       | 5                                                                   | (2.6)        |
| North Dakota                           | 20          | 19                                                             | (95.0)        | 3                                                                   | (15.8)       |
| Ohio                                   | 142         | 142                                                            | (100.0)       | 3                                                                   | (2.1)        |
| Oklahoma                               | 76          | 74                                                             | (97.4)        | 3                                                                   | (4.1)        |
| Oregon                                 | 60          | 60                                                             | (100.0)       | 1                                                                   | (1.7)        |
| Pennsylvania                           | 227         | 227                                                            | (100.0)       | 8                                                                   | (3.5)        |
| Rhode Island                           | 21          | 21                                                             | (100.0)       | 0                                                                   | 0.0          |
| South Carolina                         | 115         | 115                                                            | (100.0)       | 6                                                                   | (5.2)        |
| South Dakota                           | 17          | 16                                                             | (94.1)        | 0                                                                   | 0.0          |
| Tennessee                              | 154         | 154                                                            | (100.0)       | 8                                                                   | (5.2)        |
| Texas                                  | 1155        | 1154                                                           | (99.9)        | 115                                                                 | (10.0)       |
| Utah                                   | 36          | 36                                                             | (100.0)       | 0                                                                   | 0.0          |
| Vermont                                | 4           | 4                                                              | (100.0)       | 0                                                                   | 0.0          |
| Virginia                               | 222         | 222                                                            | (100.0)       | 4                                                                   | (1.8)        |
| Washington                             | 175         | 173                                                            | (98.9)        | 2                                                                   | (1.2)        |
| West Virginia                          | 8           | 8                                                              | (100.0)       | 2                                                                   | (25.0)       |
| Wisconsin                              | 62          | 62                                                             | (100.0)       | 0                                                                   | 0.0          |
| Wyoming                                | 3           | 3                                                              | (100.0)       | 0                                                                   | 0.0          |
| American Samoa <sup>6</sup>            | 1           | 1                                                              | (100.0)       | 0                                                                   | 0.0          |
| Fed. States of Micronesia <sup>6</sup> | 124         | 123                                                            | (99.2)        | 0                                                                   | 0.0          |
| Guam <sup>6</sup>                      | 53          | 53                                                             | (100.0)       | 0                                                                   | 0.0          |
| Marshall Islands <sup>6</sup>          | 106         | 106                                                            | (100.0)       | 0                                                                   | 0.0          |
| N. Mariana Islands <sup>6</sup>        | 21          | 21                                                             | (100.0)       | 0                                                                   | 0.0          |
| Puerto Rico <sup>6</sup>               | 70          | 70                                                             | (100.0)       | 6                                                                   | (8.6)        |
| Republic of Palau <sup>6</sup>         | 4           | 4                                                              | (100.0)       | 0                                                                   | 0.0          |
| U.S. Virgin Islands <sup>6</sup>       | 2           | 1                                                              | (50.0)        | 0                                                                   | 0.0          |

**Table 42. (Con't) Tuberculosis Cases and Percentages by Residence in and Type of Correctional Facilities,<sup>1</sup> Age ≥ 15: Reporting Areas, 2012**

| Federal Prison |         | State Prison |         | Local Jail |         | Juvenile Facility <sup>3</sup> |       | Other Type of Facility |         | Unknown/Missing |        | Cases with Information on ICE Custody <sup>4</sup> |         | Cases Under ICE Custody |         |
|----------------|---------|--------------|---------|------------|---------|--------------------------------|-------|------------------------|---------|-----------------|--------|----------------------------------------------------|---------|-------------------------|---------|
| No.            | (%)     | No.          | (%)     | No.        | (%)     | No.                            | (%)   | No.                    | (%)     | No.             | (%)    | No.                                                | (%)     | No.                     | (%)     |
| 71             | (18.5)  | 77           | (20.1)  | 141        | (36.7)  | 4                              | (1.0) | 87                     | (22.7)  | 4               | (1.0)  | 377                                                | (98.2)  | 130                     | (34.5)  |
| 0              | 0.0     | 8            | (80.0)  | 1          | (10.0)  | 0                              | 0.0   | 1                      | (10.0)  | 0               | 0.0    | 9                                                  | (90.0)  | 0                       | 0.0     |
| 0              | 0.0     | 3            | (75.0)  | 1          | (25.0)  | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 4                                                  | (100.0) | 0                       | 0.0     |
| 11             | (20.0)  | 1            | (1.8)   | 3          | (5.5)   | 3                              | (5.5) | 37                     | (67.3)  | 0               | 0.0    | 55                                                 | (100.0) | 49                      | (89.1)  |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 24             | (42.1)  | 4            | (7.0)   | 28         | (49.1)  | 0                              | 0.0   | 1                      | (1.8)   | 0               | 0.0    | 57                                                 | (100.0) | 16                      | (28.1)  |
| 0              | 0.0     | 1            | (50.0)  | 1          | (50.0)  | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 2                                                  | (100.0) | 0                       | 0.0     |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 0              | 0.0     | 0            | 0.0     | 1          | (100.0) | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 1                                                  | (100.0) | 0                       | 0.0     |
| 3              | (12.5)  | 13           | (54.2)  | 7          | (29.2)  | 0                              | 0.0   | 1                      | (4.2)   | 0               | 0.0    | 24                                                 | (100.0) | 4                       | (16.7)  |
| 0              | 0.0     | 6            | (31.6)  | 8          | (42.1)  | 0                              | 0.0   | 5                      | (26.3)  | 0               | 0.0    | 19                                                 | (100.0) | 5                       | (26.3)  |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 0              | 0.0     | 1            | (100.0) | 0          | 0.0     | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 1                                                  | (100.0) | 0                       | 0.0     |
| 0              | 0.0     | 2            | (33.3)  | 3          | (50.0)  | 0                              | 0.0   | 1                      | (16.7)  | 0               | 0.0    | 5                                                  | (83.3)  | 1                       | (20.0)  |
| 0              | 0.0     | 0            | 0.0     | 3          | (100.0) | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 3                                                  | (100.0) | 0                       | 0.0     |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 0              | 0.0     | 0            | 0.0     | 1          | (100.0) | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 1                                                  | (100.0) | 0                       | 0.0     |
| 0              | 0.0     | 4            | (57.1)  | 3          | (42.9)  | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 7                                                  | (100.0) | 1                       | (14.3)  |
| 0              | 0.0     | 1            | (20.0)  | 3          | (60.0)  | 0                              | 0.0   | 1                      | (20.0)  | 0               | 0.0    | 5                                                  | (100.0) | 2                       | (40.0)  |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 0              | 0.0     | 0            | 0.0     | 1          | (100.0) | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 0                                                  | 0.0     | 0                       | 0.0     |
| 0              | 0.0     | 2            | (40.0)  | 2          | (40.0)  | 0                              | 0.0   | 1                      | (20.0)  | 0               | 0.0    | 5                                                  | (100.0) | 0                       | 0.0     |
| 1              | (50.0)  | 0            | 0.0     | 1          | (50.0)  | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 2                                                  | (100.0) | 0                       | 0.0     |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 1              | (33.3)  | 1            | (33.3)  | 1          | (33.3)  | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 3                                                  | (100.0) | 1                       | (33.3)  |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 3               | ...    | 0                                                  | ...     | 0                       | ...     |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 0              | 0.0     | 0            | 0.0     | 1          | (100.0) | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 1                                                  | (100.0) | 1                       | (100.0) |
| 0              | 0.0     | 0            | 0.0     | 2          | (100.0) | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 2                                                  | (100.0) | 1                       | (50.0)  |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 0              | 0.0     | 1            | (50.0)  | 1          | (50.0)  | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 2                                                  | (100.0) | 0                       | 0.0     |
| 0              | 0.0     | 0            | 0.0     | 0          | 0.0     | 0                              | 0.0   | 2                      | (100.0) | 0               | 0.0    | 2                                                  | (100.0) | 1                       | (50.0)  |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 0              | 0.0     | 1            | (12.5)  | 7          | (87.5)  | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 8                                                  | (100.0) | 1                       | (12.5)  |
| 0              | 0.0     | 3            | (60.0)  | 2          | (40.0)  | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 5                                                  | (100.0) | 0                       | 0.0     |
| 0              | 0.0     | 0            | 0.0     | 3          | (100.0) | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 3                                                  | (100.0) | 0                       | 0.0     |
| 2              | (66.7)  | 0            | 0.0     | 1          | (33.3)  | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 3                                                  | (100.0) | 0                       | 0.0     |
| 1              | (33.3)  | 2            | (66.7)  | 0          | 0.0     | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 3                                                  | (100.0) | 0                       | 0.0     |
| 1              | (100.0) | 0            | 0.0     | 0          | 0.0     | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 1                                                  | (100.0) | 0                       | 0.0     |
| 2              | (25.0)  | 0            | 0.0     | 6          | (75.0)  | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 8                                                  | (100.0) | 4                       | (50.0)  |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 1              | (16.7)  | 1            | (16.7)  | 4          | (66.7)  | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 6                                                  | (100.0) | 0                       | 0.0     |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 0              | 0.0     | 1            | (12.5)  | 7          | (87.5)  | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 7                                                  | (87.5)  | 0                       | 0.0     |
| 21             | (18.3)  | 21           | (18.3)  | 38         | (33.0)  | 1                              | (0.9) | 34                     | (29.6)  | 0               | 0.0    | 115                                                | (100.0) | 39                      | (33.9)  |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 1              | (25.0)  | 0            | 0.0     | 1          | (25.0)  | 0                              | 0.0   | 2                      | (50.0)  | 0               | 0.0    | 4                                                  | (100.0) | 2                       | (50.0)  |
| 0              | 0.0     | 0            | 0.0     | 0          | 0.0     | 0                              | 0.0   | 1                      | (50.0)  | 1               | (50.0) | 2                                                  | (100.0) | 2                       | (100.0) |
| 2              | (100.0) | 0            | 0.0     | 0          | 0.0     | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 2                                                  | (100.0) | 0                       | 0.0     |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 3              | (50.0)  | 3            | (50.0)  | 0          | 0.0     | 0                              | 0.0   | 0                      | 0.0     | 0               | 0.0    | 3                                                  | (50.0)  | 1                       | (33.3)  |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |
| 0              | ...     | 0            | ...     | 0          | ...     | 0                              | ...   | 0                      | ...     | 0               | ...    | 0                                                  | ...     | 0                       | ...     |

<sup>1</sup> Resident of correctional facility at time of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>2</sup> Percent of those with known status.

<sup>3</sup> Excludes youth who are under 15 years of age.

<sup>4</sup> Immigration and Customs Enforcement (ICE) detainment among cases who were residents in correctional facilities.

<sup>5</sup> Excludes New York City.

<sup>6</sup> Not included in U.S. totals.

**Note:** Ellipses indicate data not available.

See Surveillance Slide #28.

**Table 43. Tuberculosis Cases and Percentages by Homeless Status,<sup>1</sup> Age  $\geq 15$ : Reporting Areas, 2012**

| Reporting Area                         | Total Cases  | Cases with Information on Homeless Status |               | Cases Reported As Being Homeless <sup>2</sup> |              |
|----------------------------------------|--------------|-------------------------------------------|---------------|-----------------------------------------------|--------------|
|                                        |              | No.                                       | (%)           | No.                                           | (%)          |
| <b>United States</b>                   | <b>9,456</b> | <b>9,345</b>                              | <b>(98.8)</b> | <b>528</b>                                    | <b>(5.7)</b> |
| Alabama                                | 130          | 130                                       | (100.0)       | 8                                             | (6.2)        |
| Alaska                                 | 57           | 52                                        | (91.2)        | 5                                             | (9.6)        |
| Arizona                                | 201          | 176                                       | (87.6)        | 11                                            | (6.3)        |
| Arkansas                               | 67           | 67                                        | (100.0)       | 6                                             | (9.0)        |
| California                             | 2,102        | 2,086                                     | (99.2)        | 128                                           | (6.1)        |
| Colorado                               | 61           | 61                                        | (100.0)       | 4                                             | (6.6)        |
| Connecticut                            | 73           | 73                                        | (100.0)       | 2                                             | (2.7)        |
| Delaware                               | 28           | 28                                        | (100.0)       | 2                                             | (7.1)        |
| District of Columbia                   | 35           | 35                                        | (100.0)       | 2                                             | (5.7)        |
| Florida                                | 649          | 640                                       | (98.6)        | 64                                            | (10.0)       |
| Georgia                                | 334          | 332                                       | (99.4)        | 36                                            | (10.8)       |
| Hawaii                                 | 113          | 109                                       | (96.5)        | 3                                             | (2.8)        |
| Idaho                                  | 14           | 14                                        | (100.0)       | 0                                             | (0.0)        |
| Illinois                               | 331          | 330                                       | (99.7)        | 20                                            | (6.1)        |
| Indiana                                | 92           | 91                                        | (98.9)        | 9                                             | (9.9)        |
| Iowa                                   | 44           | 43                                        | (97.7)        | 1                                             | (2.3)        |
| Kansas                                 | 40           | 40                                        | (100.0)       | 9                                             | (22.5)       |
| Kentucky                               | 77           | 77                                        | (100.0)       | 6                                             | (7.8)        |
| Louisiana                              | 145          | 139                                       | (95.9)        | 7                                             | (5.0)        |
| Maine                                  | 15           | 15                                        | (100.0)       | 1                                             | (6.7)        |
| Maryland                               | 210          | 209                                       | (99.5)        | 12                                            | (5.7)        |
| Massachusetts                          | 213          | 212                                       | (99.5)        | 6                                             | (2.8)        |
| Michigan                               | 146          | 144                                       | (98.6)        | 9                                             | (6.3)        |
| Minnesota                              | 139          | 139                                       | (100.0)       | 2                                             | (1.4)        |
| Mississippi                            | 80           | 80                                        | (100.0)       | 10                                            | (12.5)       |
| Missouri                               | 85           | 78                                        | (91.8)        | 1                                             | (1.3)        |
| Montana                                | 5            | 5                                         | (100.0)       | 1                                             | (20.0)       |
| Nebraska                               | 21           | 21                                        | (100.0)       | 2                                             | (9.5)        |
| Nevada                                 | 72           | 72                                        | (100.0)       | 3                                             | (4.2)        |
| New Hampshire                          | 8            | 8                                         | (100.0)       | 0                                             | (0.0)        |
| New Jersey                             | 297          | 297                                       | (100.0)       | 4                                             | (1.3)        |
| New Mexico                             | 40           | 40                                        | (100.0)       | 1                                             | (2.5)        |
| New York State <sup>3</sup>            | 203          | 201                                       | (99.0)        | 1                                             | (0.5)        |
| New York City                          | 636          | 623                                       | (98.0)        | 19                                            | (3.0)        |
| North Carolina                         | 196          | 196                                       | (100.0)       | 7                                             | (3.6)        |
| North Dakota                           | 20           | 17                                        | (85.0)        | 5                                             | (29.4)       |
| Ohio                                   | 142          | 142                                       | (100.0)       | 10                                            | (7.0)        |
| Oklahoma                               | 76           | 72                                        | (94.7)        | 7                                             | (9.7)        |
| Oregon                                 | 60           | 60                                        | (100.0)       | 3                                             | (5.0)        |
| Pennsylvania                           | 227          | 226                                       | (99.6)        | 4                                             | (1.8)        |
| Rhode Island                           | 21           | 21                                        | (100.0)       | 0                                             | (0.0)        |
| South Carolina                         | 115          | 115                                       | (100.0)       | 12                                            | (10.4)       |
| South Dakota                           | 17           | 15                                        | (88.2)        | 0                                             | (0.0)        |
| Tennessee                              | 154          | 154                                       | (100.0)       | 6                                             | (3.9)        |
| Texas                                  | 1,155        | 1,154                                     | (99.9)        | 63                                            | (5.5)        |
| Utah                                   | 36           | 36                                        | (100.0)       | 1                                             | (2.8)        |
| Vermont                                | 4            | 4                                         | (100.0)       | 0                                             | (0.0)        |
| Virginia                               | 222          | 220                                       | (99.1)        | 9                                             | (4.1)        |
| Washington                             | 175          | 173                                       | (98.9)        | 6                                             | (3.5)        |
| West Virginia                          | 8            | 8                                         | (100.0)       | 0                                             | (0.0)        |
| Wisconsin                              | 62           | 62                                        | (100.0)       | 0                                             | (0.0)        |
| Wyoming                                | 3            | 3                                         | (100.0)       | 0                                             | (0.0)        |
| American Samoa <sup>4</sup>            | 1            | 1                                         | (100.0)       | 0                                             | (0.0)        |
| Fed. States of Micronesia <sup>4</sup> | 124          | 123                                       | (99.2)        | 4                                             | (3.3)        |
| Guam <sup>4</sup>                      | 53           | 53                                        | (100.0)       | 0                                             | (0.0)        |
| Marshall Islands <sup>4</sup>          | 106          | 106                                       | (100.0)       | 0                                             | (0.0)        |
| N. Mariana Islands <sup>4</sup>        | 21           | 21                                        | (100.0)       | 0                                             | (0.0)        |
| Puerto Rico <sup>4</sup>               | 70           | 70                                        | (100.0)       | 2                                             | (2.9)        |
| Republic of Palau <sup>4</sup>         | 4            | 4                                         | (100.0)       | 0                                             | (0.0)        |
| U.S. Virgin Islands <sup>4</sup>       | 2            | 2                                         | (100.0)       | 0                                             | (0.0)        |

<sup>1</sup> Homeless within past 12 months of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for  $\geq 75\%$  of cases.

<sup>2</sup> Percent of those with known status.

<sup>3</sup> Excludes New York City.

<sup>4</sup> Not included in U.S. totals.

**Note:** Ellipses indicate data not available.

See Surveillance Slide #29

**Table 44. Tuberculosis Cases and Percentages by Residence in Long-term Care Facilities,<sup>1</sup> Age ≥15: Reporting Areas, 2012**

| Reporting Area                         | Total Cases  | Cases with Information on Residence in Long-term Care Facilities |               | Cases Reported As Residents of Long-term Care Facilities <sup>2</sup> |              |
|----------------------------------------|--------------|------------------------------------------------------------------|---------------|-----------------------------------------------------------------------|--------------|
|                                        |              | No.                                                              | (%)           | No.                                                                   | (%)          |
| <b>United States</b>                   | <b>9,456</b> | <b>9,405</b>                                                     | <b>(99.5)</b> | <b>208</b>                                                            | <b>(2.2)</b> |
| Alabama                                | 130          | 130                                                              | (100.0)       | 5                                                                     | (3.8)        |
| Alaska                                 | 57           | 53                                                               | (93.0)        | 3                                                                     | (5.7)        |
| Arizona                                | 201          | 201                                                              | (100.0)       | 2                                                                     | (1.0)        |
| Arkansas                               | 67           | 67                                                               | (100.0)       | 2                                                                     | (3.0)        |
| California                             | 2,102        | 2,095                                                            | (99.7)        | 48                                                                    | (2.3)        |
| Colorado                               | 61           | 61                                                               | (100.0)       | 1                                                                     | (1.6)        |
| Connecticut                            | 73           | 73                                                               | (100.0)       | 0                                                                     | (0.0)        |
| Delaware                               | 28           | 28                                                               | (100.0)       | 0                                                                     | (0.0)        |
| District of Columbia                   | 35           | 35                                                               | (100.0)       | 0                                                                     | (0.0)        |
| Florida                                | 649          | 649                                                              | (100.0)       | 3                                                                     | (0.5)        |
| Georgia                                | 334          | 333                                                              | (99.7)        | 6                                                                     | (1.8)        |
| Hawaii                                 | 113          | 113                                                              | (100.0)       | 2                                                                     | (1.8)        |
| Idaho                                  | 14           | 14                                                               | (100.0)       | 0                                                                     | (0.0)        |
| Illinois                               | 331          | 330                                                              | (99.7)        | 7                                                                     | (2.1)        |
| Indiana                                | 92           | 90                                                               | (97.8)        | 4                                                                     | (4.4)        |
| Iowa                                   | 44           | 43                                                               | (97.7)        | 0                                                                     | (0.0)        |
| Kansas                                 | 40           | 40                                                               | (100.0)       | 1                                                                     | (2.5)        |
| Kentucky                               | 77           | 76                                                               | (98.7)        | 5                                                                     | (6.6)        |
| Louisiana                              | 145          | 141                                                              | (97.2)        | 5                                                                     | (3.5)        |
| Maine                                  | 15           | 15                                                               | (100.0)       | 0                                                                     | (0.0)        |
| Maryland                               | 210          | 210                                                              | (100.0)       | 2                                                                     | (1.0)        |
| Massachusetts                          | 213          | 212                                                              | (99.5)        | 1                                                                     | (0.5)        |
| Michigan                               | 146          | 145                                                              | (99.3)        | 8                                                                     | (5.5)        |
| Minnesota                              | 139          | 139                                                              | (100.0)       | 1                                                                     | (0.7)        |
| Mississippi                            | 80           | 80                                                               | (100.0)       | 4                                                                     | (5.0)        |
| Missouri                               | 85           | 78                                                               | (91.8)        | 2                                                                     | (2.6)        |
| Montana                                | 5            | 5                                                                | (100.0)       | 0                                                                     | (0.0)        |
| Nebraska                               | 21           | 20                                                               | (95.2)        | 0                                                                     | (0.0)        |
| Nevada                                 | 72           | 71                                                               | (98.6)        | 2                                                                     | (2.8)        |
| New Hampshire                          | 8            | 8                                                                | (100.0)       | 0                                                                     | (0.0)        |
| New Jersey                             | 297          | 297                                                              | (100.0)       | 3                                                                     | (1.0)        |
| New Mexico                             | 40           | 40                                                               | (100.0)       | 1                                                                     | (2.5)        |
| New York State <sup>3</sup>            | 203          | 203                                                              | (100.0)       | 5                                                                     | (2.5)        |
| New York City                          | 636          | 629                                                              | (98.9)        | 26                                                                    | (4.1)        |
| North Carolina                         | 196          | 196                                                              | (100.0)       | 8                                                                     | (4.1)        |
| North Dakota                           | 20           | 19                                                               | (95.0)        | 0                                                                     | (0.0)        |
| Ohio                                   | 142          | 142                                                              | (100.0)       | 4                                                                     | (2.8)        |
| Oklahoma                               | 76           | 73                                                               | (96.1)        | 1                                                                     | (1.4)        |
| Oregon                                 | 60           | 60                                                               | (100.0)       | 2                                                                     | (3.3)        |
| Pennsylvania                           | 227          | 227                                                              | (100.0)       | 10                                                                    | (4.4)        |
| Rhode Island                           | 21           | 21                                                               | (100.0)       | 1                                                                     | (4.8)        |
| South Carolina                         | 115          | 115                                                              | (100.0)       | 3                                                                     | (2.6)        |
| South Dakota                           | 17           | 16                                                               | (94.1)        | 1                                                                     | (6.3)        |
| Tennessee                              | 154          | 154                                                              | (100.0)       | 5                                                                     | (3.2)        |
| Texas                                  | 1,155        | 1,150                                                            | (99.6)        | 11                                                                    | (1.0)        |
| Utah                                   | 36           | 36                                                               | (100.0)       | 0                                                                     | (0.0)        |
| Vermont                                | 4            | 4                                                                | (100.0)       | 0                                                                     | (0.0)        |
| Virginia                               | 222          | 222                                                              | (100.0)       | 2                                                                     | (0.9)        |
| Washington                             | 175          | 173                                                              | (98.9)        | 10                                                                    | (5.8)        |
| West Virginia                          | 8            | 8                                                                | (100.0)       | 0                                                                     | (0.0)        |
| Wisconsin                              | 62           | 62                                                               | (100.0)       | 0                                                                     | (0.0)        |
| Wyoming                                | 3            | 3                                                                | (100.0)       | 1                                                                     | (33.3)       |
| American Samoa <sup>4</sup>            | 1            | 1                                                                | (100.0)       | 0                                                                     | (0.0)        |
| Fed. States of Micronesia <sup>4</sup> | 124          | 124                                                              | (100.0)       | 0                                                                     | (0.0)        |
| Guam <sup>4</sup>                      | 53           | 53                                                               | (100.0)       | 0                                                                     | (0.0)        |
| Marshall Islands <sup>4</sup>          | 106          | 106                                                              | (100.0)       | 0                                                                     | (0.0)        |
| N. Mariana Islands <sup>4</sup>        | 21           | 21                                                               | (100.0)       | 1                                                                     | (4.8)        |
| Puerto Rico <sup>4</sup>               | 70           | 70                                                               | (100.0)       | 10                                                                    | (14.3)       |
| Republic of Palau <sup>4</sup>         | 4            | 4                                                                | (100.0)       | 0                                                                     | (0.0)        |
| U.S. Virgin Islands <sup>4</sup>       | 2            | 2                                                                | (100.0)       | 0                                                                     | (0.0)        |

<sup>1</sup> Resident of long-term care facility at time of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>2</sup> Percent of those with known status.

<sup>3</sup> Excludes New York City.

<sup>4</sup> Not included in U.S. totals.

**Note:** Ellipses indicate data not available.

**Table 45. Tuberculosis Cases and Percentages by Injecting Drug Use,<sup>1</sup> Age  $\geq 15$ : Reporting Areas, 2012**

| Reporting Area                         | Total Cases  | Cases with Information on Injecting Drug Use |               | Cases Reporting Injecting Drug Use |              |
|----------------------------------------|--------------|----------------------------------------------|---------------|------------------------------------|--------------|
|                                        |              | No.                                          | (%)           | No.                                | (%)          |
| <b>United States</b>                   | <b>9,456</b> | <b>9,264</b>                                 | <b>(98.0)</b> | <b>138</b>                         | <b>(1.5)</b> |
| Alabama                                | 130          | 129                                          | (99.2)        | 0                                  | (0.0)        |
| Alaska                                 | 57           | 50                                           | (87.7)        | 1                                  | (2.0)        |
| Arizona                                | 201          | 169                                          | (84.1)        | 7                                  | (4.1)        |
| Arkansas                               | 67           | 67                                           | (100.0)       | 1                                  | (1.5)        |
| California                             | 2,102        | 2,064                                        | (98.2)        | 41                                 | (2.0)        |
| Colorado                               | 61           | 61                                           | (100.0)       | 0                                  | (0.0)        |
| Connecticut                            | 73           | 73                                           | (100.0)       | 0                                  | (0.0)        |
| Delaware                               | 28           | 28                                           | (100.0)       | 0                                  | (0.0)        |
| District of Columbia                   | 35           | 35                                           | (100.0)       | 1                                  | (2.9)        |
| Florida                                | 649          | 644                                          | (99.2)        | 10                                 | (1.6)        |
| Georgia                                | 334          | 328                                          | (98.2)        | 2                                  | (0.6)        |
| Hawaii                                 | 113          | 88                                           | (77.9)        | 1                                  | (1.1)        |
| Idaho                                  | 14           | 14                                           | (100.0)       | 0                                  | (0.0)        |
| Illinois                               | 331          | 328                                          | (99.1)        | 3                                  | (0.9)        |
| Indiana                                | 92           | 90                                           | (97.8)        | 2                                  | (2.2)        |
| Iowa                                   | 44           | 43                                           | (97.7)        | 0                                  | (0.0)        |
| Kansas                                 | 40           | 40                                           | (100.0)       | 0                                  | (0.0)        |
| Kentucky                               | 77           | 77                                           | (100.0)       | 1                                  | (1.3)        |
| Louisiana                              | 145          | 137                                          | (94.5)        | 3                                  | (2.2)        |
| Maine                                  | 15           | 15                                           | (100.0)       | 0                                  | (0.0)        |
| Maryland                               | 210          | 209                                          | (99.5)        | 2                                  | (1.0)        |
| Massachusetts                          | 213          | 212                                          | (99.5)        | 1                                  | (0.5)        |
| Michigan                               | 146          | 139                                          | (95.2)        | 1                                  | (0.7)        |
| Minnesota                              | 139          | 139                                          | (100.0)       | 2                                  | (1.4)        |
| Mississippi                            | 80           | 80                                           | (100.0)       | 1                                  | (1.3)        |
| Missouri                               | 85           | 78                                           | (91.8)        | 1                                  | (1.3)        |
| Montana                                | 5            | 5                                            | (100.0)       | 0                                  | (0.0)        |
| Nebraska                               | 21           | 20                                           | (95.2)        | 1                                  | (5.0)        |
| Nevada                                 | 72           | 69                                           | (95.8)        | 2                                  | (2.9)        |
| New Hampshire                          | 8            | 8                                            | (100.0)       | 0                                  | (0.0)        |
| New Jersey                             | 297          | 297                                          | (100.0)       | 1                                  | (0.3)        |
| New Mexico                             | 40           | 40                                           | (100.0)       | 3                                  | (7.5)        |
| New York State <sup>2</sup>            | 203          | 195                                          | (96.1)        | 0                                  | (0.0)        |
| New York City                          | 636          | 631                                          | (99.2)        | 7                                  | (1.1)        |
| North Carolina                         | 196          | 196                                          | (100.0)       | 0                                  | (0.0)        |
| North Dakota                           | 20           | 9                                            | (45.0)        | --                                 | --           |
| Ohio                                   | 142          | 141                                          | (99.3)        | 1                                  | (0.7)        |
| Oklahoma                               | 76           | 70                                           | (92.1)        | 0                                  | (0.0)        |
| Oregon                                 | 60           | 60                                           | (100.0)       | 0                                  | (0.0)        |
| Pennsylvania                           | 227          | 225                                          | (99.1)        | 2                                  | (0.9)        |
| Rhode Island                           | 21           | 21                                           | (100.0)       | 0                                  | (0.0)        |
| South Carolina                         | 115          | 114                                          | (99.1)        | 3                                  | (2.6)        |
| South Dakota                           | 17           | 14                                           | (82.4)        | 0                                  | (0.0)        |
| Tennessee                              | 154          | 154                                          | (100.0)       | 2                                  | (1.3)        |
| Texas                                  | 1,155        | 1,154                                        | (99.9)        | 28                                 | (2.4)        |
| Utah                                   | 36           | 36                                           | (100.0)       | 0                                  | (0.0)        |
| Vermont                                | 4            | 4                                            | (100.0)       | 0                                  | (0.0)        |
| Virginia                               | 222          | 222                                          | (100.0)       | 2                                  | (0.9)        |
| Washington                             | 175          | 173                                          | (98.9)        | 2                                  | (1.2)        |
| West Virginia                          | 8            | 8                                            | (100.0)       | 0                                  | (0.0)        |
| Wisconsin                              | 62           | 61                                           | (98.4)        | 1                                  | (1.6)        |
| Wyoming                                | 3            | 0                                            | (0.0)         | --                                 | --           |
| American Samoa <sup>3</sup>            | 1            | 1                                            | (100.0)       | 0                                  | (0.0)        |
| Fed. States of Micronesia <sup>3</sup> | 124          | 124                                          | (100.0)       | 1                                  | (0.8)        |
| Guam <sup>3</sup>                      | 53           | 53                                           | (100.0)       | 0                                  | (0.0)        |
| Marshall Islands <sup>3</sup>          | 106          | 106                                          | (100.0)       | 0                                  | (0.0)        |
| N. Mariana Islands <sup>3</sup>        | 21           | 21                                           | (100.0)       | 0                                  | (0.0)        |
| Puerto Rico <sup>3</sup>               | 70           | 70                                           | (100.0)       | 10                                 | (14.3)       |
| Republic of Palau <sup>3</sup>         | 4            | 4                                            | (100.0)       | 0                                  | (0.0)        |
| U.S. Virgin Islands <sup>3</sup>       | 2            | 2                                            | (100.0)       | 0                                  | (0.0)        |

<sup>1</sup> Injecting drug use within past 12 months of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for  $\geq 75\%$  of cases.

<sup>2</sup> Excludes New York City.

<sup>3</sup> Not included in U.S. totals.

**Note:** Ellipses indicate data not available.

**Table 46. Tuberculosis Cases and Percentages by Noninjecting Drug Use,<sup>1</sup> Age ≥15: Reporting Areas, 2012**

| Reporting Area                         | Total Cases  | Cases with Information on Noninjecting Drug Use |               | Cases Reporting Noninjecting Drug Use |              |
|----------------------------------------|--------------|-------------------------------------------------|---------------|---------------------------------------|--------------|
|                                        |              | No.                                             | (%)           | No.                                   | (%)          |
| <b>United States</b>                   | <b>9,456</b> | <b>9,246</b>                                    | <b>(97.8)</b> | <b>687</b>                            | <b>(7.4)</b> |
| Alabama                                | 130          | 129                                             | (99.2)        | 16                                    | (12.4)       |
| Alaska                                 | 57           | 49                                              | (86.0)        | 13                                    | (26.5)       |
| Arizona                                | 201          | 170                                             | (84.6)        | 26                                    | (15.3)       |
| Arkansas                               | 67           | 67                                              | (100.0)       | 3                                     | (4.5)        |
| California                             | 2,102        | 2,061                                           | (98.0)        | 116                                   | (5.6)        |
| Colorado                               | 61           | 61                                              | (100.0)       | 4                                     | (6.6)        |
| Connecticut                            | 73           | 73                                              | (100.0)       | 3                                     | (4.1)        |
| Delaware                               | 28           | 28                                              | (100.0)       | 3                                     | (10.7)       |
| District of Columbia                   | 35           | 35                                              | (100.0)       | 3                                     | (8.6)        |
| Florida                                | 649          | 643                                             | (99.1)        | 68                                    | (10.6)       |
| Georgia                                | 334          | 328                                             | (98.2)        | 28                                    | (8.5)        |
| Hawaii                                 | 113          | 85                                              | (75.2)        | 1                                     | (1.2)        |
| Idaho                                  | 14           | 14                                              | (100.0)       | 0                                     | (0.0)        |
| Illinois                               | 331          | 326                                             | (98.5)        | 25                                    | (7.7)        |
| Indiana                                | 92           | 90                                              | (97.8)        | 7                                     | (7.8)        |
| Iowa                                   | 44           | 43                                              | (97.7)        | 0                                     | (0.0)        |
| Kansas                                 | 40           | 40                                              | (100.0)       | 3                                     | (7.5)        |
| Kentucky                               | 77           | 77                                              | (100.0)       | 9                                     | (11.7)       |
| Louisiana                              | 145          | 137                                             | (94.5)        | 15                                    | (10.9)       |
| Maine                                  | 15           | 15                                              | (100.0)       | 2                                     | (13.3)       |
| Maryland                               | 210          | 208                                             | (99.0)        | 6                                     | (2.9)        |
| Massachusetts                          | 213          | 213                                             | (100.0)       | 6                                     | (2.8)        |
| Michigan                               | 146          | 134                                             | (91.8)        | 10                                    | (7.5)        |
| Minnesota                              | 139          | 139                                             | (100.0)       | 3                                     | (2.2)        |
| Mississippi                            | 80           | 80                                              | (100.0)       | 6                                     | (7.5)        |
| Missouri                               | 85           | 78                                              | (91.8)        | 4                                     | (5.1)        |
| Montana                                | 5            | 5                                               | (100.0)       | 0                                     | (0.0)        |
| Nebraska                               | 21           | 20                                              | (95.2)        | 2                                     | (10.0)       |
| Nevada                                 | 72           | 69                                              | (95.8)        | 9                                     | (13.0)       |
| New Hampshire                          | 8            | 8                                               | (100.0)       | 0                                     | (0.0)        |
| New Jersey                             | 297          | 297                                             | (100.0)       | 14                                    | (4.7)        |
| New Mexico                             | 40           | 40                                              | (100.0)       | 6                                     | (15.0)       |
| New York State <sup>2</sup>            | 203          | 194                                             | (95.6)        | 5                                     | (2.6)        |
| New York City                          | 636          | 629                                             | (98.9)        | 39                                    | (6.2)        |
| North Carolina                         | 196          | 196                                             | (100.0)       | 23                                    | (11.7)       |
| North Dakota                           | 20           | 11                                              | (55.0)        | --                                    | --           |
| Ohio                                   | 142          | 141                                             | (99.3)        | 14                                    | (9.9)        |
| Oklahoma                               | 76           | 69                                              | (90.8)        | 6                                     | (8.7)        |
| Oregon                                 | 60           | 60                                              | (100.0)       | 6                                     | (10.0)       |
| Pennsylvania                           | 227          | 225                                             | (99.1)        | 7                                     | (3.1)        |
| Rhode Island                           | 21           | 21                                              | (100.0)       | 2                                     | (9.5)        |
| South Carolina                         | 115          | 114                                             | (99.1)        | 18                                    | (15.8)       |
| South Dakota                           | 17           | 14                                              | (82.4)        | 2                                     | (14.3)       |
| Tennessee                              | 154          | 154                                             | (100.0)       | 23                                    | (14.9)       |
| Texas                                  | 1,155        | 1,154                                           | (99.9)        | 104                                   | (9.0)        |
| Utah                                   | 36           | 36                                              | (100.0)       | 0                                     | (0.0)        |
| Vermont                                | 4            | 4                                               | (100.0)       | 0                                     | (0.0)        |
| Virginia                               | 222          | 222                                             | (100.0)       | 15                                    | (6.8)        |
| Washington                             | 175          | 171                                             | (97.7)        | 4                                     | (2.3)        |
| West Virginia                          | 8            | 8                                               | (100.0)       | 1                                     | (12.5)       |
| Wisconsin                              | 62           | 61                                              | (98.4)        | 1                                     | (1.6)        |
| Wyoming                                | 3            | 0                                               | (0.0)         | --                                    | --           |
| American Samoa <sup>3</sup>            | 1            | 1                                               | (100.0)       | 0                                     | (0.0)        |
| Fed. States of Micronesia <sup>3</sup> | 124          | 124                                             | (100.0)       | 17                                    | (13.7)       |
| Guam <sup>3</sup>                      | 53           | 53                                              | (100.0)       | 0                                     | (0.0)        |
| Marshall Islands <sup>3</sup>          | 106          | 106                                             | (100.0)       | 2                                     | (1.9)        |
| N. Mariana Islands <sup>3</sup>        | 21           | 21                                              | (100.0)       | 0                                     | (0.0)        |
| Puerto Rico <sup>3</sup>               | 70           | 70                                              | (100.0)       | 13                                    | (18.6)       |
| Republic of Palau <sup>3</sup>         | 4            | 4                                               | (100.0)       | 0                                     | (0.0)        |
| U.S. Virgin Islands <sup>3</sup>       | 2            | 2                                               | (100.0)       | 0                                     | (0.0)        |

<sup>1</sup> Noninjecting drug use within past 12 months of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>2</sup> Excludes New York City.

<sup>3</sup> Not included in U.S. totals.

**Note:** Ellipses indicate data not available.

**Table 47. Tuberculosis Cases and Percentages by Excess Alcohol Use,<sup>1</sup> Age ≥15:  
Reporting Areas, 2012**

| Reporting Area                         | Total Cases  | Cases with Information on Excess Alcohol Use |               | Cases Reporting Excess Alcohol Use |               |
|----------------------------------------|--------------|----------------------------------------------|---------------|------------------------------------|---------------|
|                                        |              | No.                                          | (%)           | No.                                | (%)           |
| <b>United States</b>                   | <b>9,456</b> | <b>9,263</b>                                 | <b>(98.0)</b> | <b>1,152</b>                       | <b>(12.4)</b> |
| Alabama                                | 130          | 129                                          | (99.2)        | 20                                 | (15.5)        |
| Alaska                                 | 57           | 51                                           | (89.5)        | 27                                 | (52.9)        |
| Arizona                                | 201          | 174                                          | (86.6)        | 24                                 | (13.8)        |
| Arkansas                               | 67           | 67                                           | (100.0)       | 12                                 | (17.9)        |
| California                             | 2,102        | 2,061                                        | (98.0)        | 199                                | (9.7)         |
| Colorado                               | 61           | 61                                           | (100.0)       | 5                                  | (8.2)         |
| Connecticut                            | 73           | 73                                           | (100.0)       | 5                                  | (6.8)         |
| Delaware                               | 28           | 28                                           | (100.0)       | 4                                  | (14.3)        |
| District of Columbia                   | 35           | 35                                           | (100.0)       | 1                                  | (2.9)         |
| Florida                                | 649          | 644                                          | (99.2)        | 116                                | (18.0)        |
| Georgia                                | 334          | 328                                          | (98.2)        | 52                                 | (15.9)        |
| Hawaii                                 | 113          | 101                                          | (89.4)        | 11                                 | (10.9)        |
| Idaho                                  | 14           | 14                                           | (100.0)       | 2                                  | (14.3)        |
| Illinois                               | 331          | 326                                          | (98.5)        | 40                                 | (12.3)        |
| Indiana                                | 92           | 90                                           | (97.8)        | 17                                 | (18.9)        |
| Iowa                                   | 44           | 43                                           | (97.7)        | 7                                  | (16.3)        |
| Kansas                                 | 40           | 40                                           | (100.0)       | 7                                  | (17.5)        |
| Kentucky                               | 77           | 77                                           | (100.0)       | 10                                 | (13.0)        |
| Louisiana                              | 145          | 137                                          | (94.5)        | 21                                 | (15.3)        |
| Maine                                  | 15           | 15                                           | (100.0)       | 2                                  | (13.3)        |
| Maryland                               | 210          | 208                                          | (99.0)        | 17                                 | (8.2)         |
| Massachusetts                          | 213          | 213                                          | (100.0)       | 19                                 | (8.9)         |
| Michigan                               | 146          | 134                                          | (91.8)        | 12                                 | (9.0)         |
| Minnesota                              | 139          | 139                                          | (100.0)       | 4                                  | (2.9)         |
| Mississippi                            | 80           | 80                                           | (100.0)       | 19                                 | (23.8)        |
| Missouri                               | 85           | 78                                           | (91.8)        | 10                                 | (12.8)        |
| Montana                                | 5            | 5                                            | (100.0)       | 1                                  | (20.0)        |
| Nebraska                               | 21           | 20                                           | (95.2)        | 6                                  | (30.0)        |
| Nevada                                 | 72           | 70                                           | (97.2)        | 7                                  | (10.0)        |
| New Hampshire                          | 8            | 8                                            | (100.0)       | 0                                  | (0.0)         |
| New Jersey                             | 297          | 297                                          | (100.0)       | 22                                 | (7.4)         |
| New Mexico                             | 40           | 40                                           | (100.0)       | 7                                  | (17.5)        |
| New York State <sup>2</sup>            | 203          | 190                                          | (93.6)        | 10                                 | (5.3)         |
| New York City                          | 636          | 626                                          | (98.4)        | 19                                 | (3.0)         |
| North Carolina                         | 196          | 196                                          | (100.0)       | 25                                 | (12.8)        |
| North Dakota                           | 20           | 12                                           | (60.0)        | --                                 | --            |
| Ohio                                   | 142          | 140                                          | (98.6)        | 19                                 | (13.6)        |
| Oklahoma                               | 76           | 70                                           | (92.1)        | 22                                 | (31.4)        |
| Oregon                                 | 60           | 60                                           | (100.0)       | 11                                 | (18.3)        |
| Pennsylvania                           | 227          | 225                                          | (99.1)        | 12                                 | (5.3)         |
| Rhode Island                           | 21           | 21                                           | (100.0)       | 3                                  | (14.3)        |
| South Carolina                         | 115          | 113                                          | (98.3)        | 31                                 | (27.4)        |
| South Dakota                           | 17           | 14                                           | (82.4)        | 4                                  | (28.6)        |
| Tennessee                              | 154          | 154                                          | (100.0)       | 34                                 | (22.1)        |
| Texas                                  | 1,155        | 1,154                                        | (99.9)        | 207                                | (17.9)        |
| Utah                                   | 36           | 36                                           | (100.0)       | 1                                  | (2.8)         |
| Vermont                                | 4            | 4                                            | (100.0)       | 1                                  | (25.0)        |
| Virginia                               | 222          | 222                                          | (100.0)       | 21                                 | (9.5)         |
| Washington                             | 175          | 171                                          | (97.7)        | 13                                 | (7.6)         |
| West Virginia                          | 8            | 8                                            | (100.0)       | 1                                  | (12.5)        |
| Wisconsin                              | 62           | 61                                           | (98.4)        | 5                                  | (8.2)         |
| Wyoming                                | 3            | 0                                            | (0.0)         | --                                 | --            |
| American Samoa <sup>3</sup>            | 1            | 1                                            | (100.0)       | 0                                  | (0.0)         |
| Fed. States of Micronesia <sup>3</sup> | 124          | 122                                          | (98.4)        | 10                                 | (8.2)         |
| Guam <sup>3</sup>                      | 53           | 53                                           | (100.0)       | 0                                  | (0.0)         |
| Marshall Islands <sup>3</sup>          | 106          | 104                                          | (98.1)        | 17                                 | (16.3)        |
| N. Mariana Islands <sup>3</sup>        | 21           | 21                                           | (100.0)       | 1                                  | (4.8)         |
| Puerto Rico <sup>3</sup>               | 70           | 70                                           | (100.0)       | 11                                 | (15.7)        |
| Republic of Palau <sup>3</sup>         | 4            | 4                                            | (100.0)       | 0                                  | (0.0)         |
| U.S. Virgin Islands <sup>3</sup>       | 2            | 2                                            | (100.0)       | 0                                  | (0.0)         |

<sup>1</sup> Excess alcohol use within past 12 months of TB diagnosis. Percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>2</sup> Excludes New York City.

<sup>3</sup> Not included in U.S. totals.

**Note:** Ellipses indicate data not available.

**Table 48. Tuberculosis Cases and Percentages by Primary Occupation, Age ≥15: Reporting Areas, 2012**

| Reporting Area                         | Total Cases  | Cases with Information on Occupation No. | Percentage of Cases by Occupation <sup>1</sup> | Information on Occupation (%) |                    |                       |                |               |                        |               |
|----------------------------------------|--------------|------------------------------------------|------------------------------------------------|-------------------------------|--------------------|-----------------------|----------------|---------------|------------------------|---------------|
|                                        |              |                                          |                                                | Unemployed                    | Health Care Worker | Correctional Employee | Migrant Worker | Retired       | Not Seeking Employment | Other         |
| <b>United States</b>                   | <b>9,456</b> | <b>9,164</b>                             | <b>(96.9)</b>                                  | <b>(28.6)</b>                 | <b>(4.0)</b>       | <b>(0.2)</b>          | <b>(1.5)</b>   | <b>(15.6)</b> | <b>(15.9)</b>          | <b>(34.2)</b> |
| Alabama                                | 130          | 130                                      | (100.0)                                        | (10.8)                        | (0.0)              | (1.5)                 | (0.0)          | (17.7)        | (39.2)                 | (30.8)        |
| Alaska                                 | 57           | 46                                       | (80.7)                                         | (34.8)                        | (2.2)              | (0.0)                 | (2.2)          | (10.9)        | (19.6)                 | (30.4)        |
| Arizona                                | 201          | 181                                      | (90.0)                                         | (26.0)                        | (4.4)              | (0.0)                 | (8.8)          | (13.8)        | (18.2)                 | (28.7)        |
| Arkansas                               | 67           | 67                                       | (100.0)                                        | (19.4)                        | (1.5)              | (0.0)                 | (0.0)          | (25.4)        | (6.0)                  | (47.8)        |
| California                             | 2,102        | 2,068                                    | (98.4)                                         | (23.9)                        | (4.2)              | (0.1)                 | (2.4)          | (20.6)        | (15.4)                 | (33.4)        |
| Colorado                               | 61           | 61                                       | (100.0)                                        | (9.8)                         | (3.3)              | (0.0)                 | (1.6)          | (21.3)        | (32.8)                 | (31.1)        |
| Connecticut                            | 73           | 73                                       | (100.0)                                        | (17.8)                        | (8.2)              | (0.0)                 | (0.0)          | (17.8)        | (21.9)                 | (34.2)        |
| Delaware                               | 28           | 28                                       | (100.0)                                        | (17.9)                        | (17.9)             | (0.0)                 | (0.0)          | (21.4)        | (10.7)                 | (32.1)        |
| District of Columbia                   | 35           | 35                                       | (100.0)                                        | (51.4)                        | (0.0)              | (0.0)                 | (0.0)          | (2.9)         | (0.0)                  | (45.7)        |
| Florida                                | 649          | 630                                      | (97.1)                                         | (64.0)                        | (2.4)              | (0.0)                 | (0.8)          | (3.8)         | (5.7)                  | (23.3)        |
| Georgia                                | 334          | 330                                      | (98.8)                                         | (36.1)                        | (2.4)              | (0.3)                 | (2.1)          | (10.0)        | (13.3)                 | (35.8)        |
| Hawaii                                 | 113          | 109                                      | (96.5)                                         | (17.4)                        | (2.8)              | (0.0)                 | (1.8)          | (21.1)        | (18.3)                 | (38.5)        |
| Idaho                                  | 14           | 13                                       | (92.9)                                         | (30.8)                        | (0.0)              | (0.0)                 | (15.4)         | (15.4)        | (15.4)                 | (23.1)        |
| Illinois                               | 331          | 320                                      | (96.7)                                         | (20.0)                        | (5.9)              | (0.0)                 | (0.3)          | (17.8)        | (21.3)                 | (34.7)        |
| Indiana                                | 92           | 92                                       | (100.0)                                        | (28.3)                        | (5.4)              | (0.0)                 | (1.1)          | (17.4)        | (16.3)                 | (31.5)        |
| Iowa                                   | 44           | 43                                       | (97.7)                                         | (4.7)                         | (0.0)              | (0.0)                 | (0.0)          | (7.0)         | (34.9)                 | (53.5)        |
| Kansas                                 | 40           | 40                                       | (100.0)                                        | (20.0)                        | (2.5)              | (0.0)                 | (2.5)          | (10.0)        | (42.5)                 | (22.5)        |
| Kentucky                               | 77           | 77                                       | (100.0)                                        | (20.8)                        | (0.0)              | (0.0)                 | (1.3)          | (14.3)        | (32.5)                 | (31.2)        |
| Louisiana                              | 145          | 131                                      | (90.3)                                         | (39.7)                        | (3.1)              | (0.0)                 | (1.5)          | (15.3)        | (10.7)                 | (29.8)        |
| Maine                                  | 15           | 15                                       | (100.0)                                        | (13.3)                        | (0.0)              | (0.0)                 | (6.7)          | (26.7)        | (13.3)                 | (40.0)        |
| Maryland                               | 210          | 207                                      | (98.6)                                         | (18.8)                        | (9.7)              | (0.5)                 | (0.5)          | (10.6)        | (18.4)                 | (41.5)        |
| Massachusetts                          | 213          | 213                                      | (100.0)                                        | (24.4)                        | (6.6)              | (0.0)                 | (0.5)          | (20.2)        | (12.7)                 | (35.7)        |
| Michigan                               | 146          | 134                                      | (91.8)                                         | (67.9)                        | (3.0)              | (0.7)                 | (0.0)          | (0.0)         | (0.0)                  | (28.4)        |
| Minnesota                              | 139          | 139                                      | (100.0)                                        | (13.7)                        | (1.4)              | (0.7)                 | (0.0)          | (7.9)         | (33.1)                 | (43.2)        |
| Mississippi                            | 80           | 80                                       | (100.0)                                        | (46.3)                        | (1.3)              | (1.3)                 | (0.0)          | (13.8)        | (12.5)                 | (25.0)        |
| Missouri                               | 85           | 2                                        | (2.4)                                          | --                            | --                 | --                    | --             | --            | --                     | --            |
| Montana                                | 5            | 5                                        | (100.0)                                        | (0.0)                         | (0.0)              | (0.0)                 | (0.0)          | (40.0)        | (20.0)                 | (40.0)        |
| Nebraska                               | 21           | 21                                       | (100.0)                                        | (23.8)                        | (4.8)              | (0.0)                 | (0.0)          | (0.0)         | (19.0)                 | (52.4)        |
| Nevada                                 | 72           | 71                                       | (98.6)                                         | (9.9)                         | (4.2)              | (0.0)                 | (1.4)          | (23.9)        | (19.7)                 | (40.8)        |
| New Hampshire                          | 8            | 8                                        | (100.0)                                        | (25.0)                        | (12.5)             | (0.0)                 | (0.0)          | (0.0)         | (12.5)                 | (50.0)        |
| New Jersey                             | 297          | 297                                      | (100.0)                                        | (22.9)                        | (5.7)              | (0.0)                 | (1.3)          | (16.5)        | (19.5)                 | (34.0)        |
| New Mexico                             | 40           | 40                                       | (100.0)                                        | (27.5)                        | (0.0)              | (0.0)                 | (2.5)          | (32.5)        | (2.5)                  | (35.0)        |
| New York State <sup>2</sup>            | 203          | 193                                      | (95.1)                                         | (17.6)                        | (6.7)              | (0.0)                 | (1.6)          | (24.9)        | (12.4)                 | (36.8)        |
| New York City                          | 636          | 631                                      | (99.2)                                         | (41.8)                        | (6.5)              | (0.0)                 | (1.3)          | (14.1)        | (3.5)                  | (32.8)        |
| North Carolina                         | 196          | 196                                      | (100.0)                                        | (31.1)                        | (2.6)              | (0.0)                 | (1.5)          | (16.3)        | (8.2)                  | (40.3)        |
| North Dakota                           | 20           | 5                                        | (25.0)                                         | --                            | --                 | --                    | --             | --            | --                     | --            |
| Ohio                                   | 142          | 141                                      | (99.3)                                         | (25.5)                        | (4.3)              | (0.0)                 | (1.4)          | (20.6)        | (14.9)                 | (33.3)        |
| Oklahoma                               | 76           | 63                                       | (82.9)                                         | (23.8)                        | (9.5)              | (0.0)                 | (0.0)          | (15.9)        | (3.2)                  | (47.6)        |
| Oregon                                 | 60           | 60                                       | (100.0)                                        | (18.3)                        | (1.7)              | (0.0)                 | (0.0)          | (10.0)        | (20.0)                 | (50.0)        |
| Pennsylvania                           | 227          | 223                                      | (98.2)                                         | (26.9)                        | (4.5)              | (0.0)                 | (0.9)          | (21.1)        | (11.7)                 | (35.0)        |
| Rhode Island                           | 21           | 21                                       | (100.0)                                        | (9.5)                         | (0.0)              | (0.0)                 | (0.0)          | (28.6)        | (19.0)                 | (42.9)        |
| South Carolina                         | 115          | 114                                      | (99.1)                                         | (29.8)                        | (3.5)              | (0.0)                 | (0.9)          | (25.4)        | (12.3)                 | (28.1)        |
| South Dakota                           | 17           | 16                                       | (94.1)                                         | (25.0)                        | (0.0)              | (0.0)                 | (6.3)          | (18.8)        | (31.3)                 | (18.8)        |
| Tennessee                              | 154          | 153                                      | (99.4)                                         | (30.7)                        | (2.0)              | (0.0)                 | (2.0)          | (13.7)        | (14.4)                 | (37.3)        |
| Texas                                  | 1,155        | 1,143                                    | (99.0)                                         | (28.6)                        | (2.7)              | (0.7)                 | (0.2)          | (12.2)        | (22.7)                 | (33.0)        |
| Utah                                   | 36           | 36                                       | (100.0)                                        | (30.6)                        | (5.6)              | (0.0)                 | (2.8)          | (19.4)        | (2.8)                  | (38.9)        |
| Vermont                                | 4            | 4                                        | (100.0)                                        | (0.0)                         | (0.0)              | (0.0)                 | (0.0)          | (0.0)         | (75.0)                 | (25.0)        |
| Virginia                               | 222          | 220                                      | (99.1)                                         | (9.1)                         | (3.6)              | (0.0)                 | (0.5)          | (15.0)        | (18.6)                 | (53.2)        |
| Washington                             | 175          | 173                                      | (98.9)                                         | (9.8)                         | (4.6)              | (0.6)                 | (3.5)          | (15.0)        | (30.6)                 | (35.8)        |
| West Virginia                          | 8            | 7                                        | (87.5)                                         | (0.0)                         | (0.0)              | (0.0)                 | (0.0)          | (28.6)        | (28.6)                 | (42.9)        |
| Wisconsin                              | 62           | 58                                       | (93.5)                                         | (8.6)                         | (3.4)              | (0.0)                 | (1.7)          | (19.0)        | (31.0)                 | (36.2)        |
| Wyoming                                | 3            | 1                                        | (33.3)                                         | --                            | --                 | --                    | --             | --            | --                     | --            |
| American Samoa <sup>3</sup>            | 1            | 1                                        | (100.0)                                        | (0.0)                         | (0.0)              | (0.0)                 | (0.0)          | (100.0)       | (0.0)                  | (0.0)         |
| Fed. States of Micronesia <sup>3</sup> | 124          | 124                                      | (100.0)                                        | (62.9)                        | (0.8)              | (0.0)                 | (1.6)          | (1.6)         | (15.3)                 | (17.7)        |
| Guam <sup>3</sup>                      | 53           | 53                                       | (100.0)                                        | (30.2)                        | (0.0)              | (0.0)                 | (0.0)          | (24.5)        | (5.7)                  | (39.6)        |
| Marshall Islands <sup>3</sup>          | 106          | 106                                      | (100.0)                                        | (38.7)                        | (3.8)              | (0.0)                 | (0.0)          | (2.8)         | (20.8)                 | (34.0)        |
| N. Mariana Islands <sup>3</sup>        | 21           | 21                                       | (100.0)                                        | (9.5)                         | (0.0)              | (0.0)                 | (38.1)         | (4.8)         | (19.0)                 | (28.6)        |
| Puerto Rico <sup>3</sup>               | 70           | 70                                       | (100.0)                                        | (34.3)                        | (4.3)              | (0.0)                 | (0.0)          | (17.1)        | (25.7)                 | (18.6)        |
| Republic of Palau <sup>3</sup>         | 4            | 4                                        | (100.0)                                        | (25.0)                        | (0.0)              | (0.0)                 | (0.0)          | (50.0)        | (0.0)                  | (25.0)        |
| U.S. Virgin Islands <sup>3</sup>       | ...          | ...                                      | ...                                            | ...                           | ...                | ...                   | ...            | ...           | ...                    | ...           |

<sup>1</sup> Occupation within past 12 months of TB diagnosis. Overall U.S. percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>2</sup> Excludes New York City.

<sup>3</sup> Not included in U.S. totals.

**Note:** Ellipses indicate data not available.

**Table 49. Tuberculosis Cases and Percentages by Initial Drug Regimen: Reporting Areas, 2012**

| Reporting Area                         | Total Cases  | Cases in Persons Alive at Diagnosis | Cases with Information on Initial Drug Regimen <sup>1</sup> |               | Percentage of Cases in Persons with Initial Drug Regimen <sup>2,3</sup> |              |                   |
|----------------------------------------|--------------|-------------------------------------|-------------------------------------------------------------|---------------|-------------------------------------------------------------------------|--------------|-------------------|
|                                        |              |                                     | No.                                                         | (%)           | IR                                                                      | IRZ          | IRZE <sup>3</sup> |
| <b>United States</b>                   | <b>9,945</b> | <b>9,711</b>                        | <b>9,606</b>                                                | <b>(98.9)</b> | <b>(0.7)</b>                                                            | <b>(2.2)</b> | <b>(85.2)</b>     |
| Alabama                                | 134          | 133                                 | 132                                                         | (99.2)        | (0.8)                                                                   | (5.3)        | (68.9)            |
| Alaska                                 | 66           | 64                                  | 61                                                          | (95.3)        | (0.0)                                                                   | (4.9)        | (90.2)            |
| Arizona                                | 211          | 207                                 | 196                                                         | (94.7)        | (0.0)                                                                   | (2.0)        | (94.4)            |
| Arkansas                               | 70           | 67                                  | 67                                                          | (100.0)       | (0.0)                                                                   | (17.9)       | (82.1)            |
| California                             | 2,191        | 2,142                               | 2,120                                                       | (99.0)        | (0.8)                                                                   | (1.3)        | (90.3)            |
| Colorado                               | 64           | 63                                  | 63                                                          | (100.0)       | (3.2)                                                                   | (0.0)        | (77.8)            |
| Connecticut                            | 74           | 73                                  | 72                                                          | (98.6)        | (0.0)                                                                   | (2.8)        | (15.3)            |
| Delaware                               | 28           | 27                                  | 27                                                          | (100.0)       | (0.0)                                                                   | (0.0)        | (85.2)            |
| District of Columbia                   | 37           | 35                                  | 35                                                          | (100.0)       | (0.0)                                                                   | (0.0)        | (94.3)            |
| Florida                                | 679          | 662                                 | 653                                                         | (98.6)        | (0.2)                                                                   | (3.5)        | (88.2)            |
| Georgia                                | 357          | 346                                 | 343                                                         | (99.1)        | (0.9)                                                                   | (1.2)        | (60.9)            |
| Hawaii                                 | 117          | 113                                 | 112                                                         | (99.1)        | (0.0)                                                                   | (0.9)        | (95.5)            |
| Idaho                                  | 15           | 15                                  | 15                                                          | (100.0)       | (6.7)                                                                   | (0.0)        | (46.7)            |
| Illinois                               | 347          | 343                                 | 338                                                         | (98.5)        | (0.9)                                                                   | (4.4)        | (84.9)            |
| Indiana                                | 102          | 99                                  | 99                                                          | (100.0)       | (0.0)                                                                   | (5.1)        | (88.9)            |
| Iowa                                   | 46           | 44                                  | 44                                                          | (100.0)       | (0.0)                                                                   | (4.5)        | (86.4)            |
| Kansas                                 | 42           | 40                                  | 40                                                          | (100.0)       | (0.0)                                                                   | (2.5)        | (95.0)            |
| Kentucky                               | 80           | 78                                  | 77                                                          | (98.7)        | (0.0)                                                                   | (2.6)        | (80.5)            |
| Louisiana                              | 149          | 143                                 | 136                                                         | (95.1)        | (0.0)                                                                   | (2.2)        | (92.6)            |
| Maine                                  | 17           | 17                                  | 17                                                          | (100.0)       | (0.0)                                                                   | (0.0)        | (94.1)            |
| Maryland                               | 224          | 222                                 | 221                                                         | (99.5)        | (3.2)                                                                   | (0.5)        | (88.7)            |
| Massachusetts                          | 215          | 209                                 | 208                                                         | (99.5)        | (2.4)                                                                   | (0.0)        | (76.0)            |
| Michigan                               | 149          | 146                                 | 140                                                         | (95.9)        | (1.4)                                                                   | (5.0)        | (52.9)            |
| Minnesota                              | 162          | 161                                 | 160                                                         | (99.4)        | (0.6)                                                                   | (4.4)        | (88.8)            |
| Mississippi                            | 81           | 78                                  | 78                                                          | (100.0)       | (1.3)                                                                   | (10.3)       | (82.1)            |
| Missouri                               | 89           | 87                                  | 84                                                          | (96.6)        | (0.0)                                                                   | (1.2)        | (79.8)            |
| Montana                                | 5            | 5                                   | 5                                                           | (100.0)       | (0.0)                                                                   | (0.0)        | (100.0)           |
| Nebraska                               | 22           | 22                                  | 22                                                          | (100.0)       | (0.0)                                                                   | (0.0)        | (86.4)            |
| Nevada                                 | 82           | 79                                  | 79                                                          | (100.0)       | (0.0)                                                                   | (0.0)        | (96.2)            |
| New Hampshire                          | 9            | 9                                   | 9                                                           | (100.0)       | (0.0)                                                                   | (0.0)        | (88.9)            |
| New Jersey                             | 302          | 293                                 | 293                                                         | (100.0)       | (0.7)                                                                   | (1.0)        | (90.8)            |
| New Mexico                             | 40           | 38                                  | 38                                                          | (100.0)       | (0.0)                                                                   | (0.0)        | (97.4)            |
| New York State <sup>4</sup>            | 215          | 210                                 | 210                                                         | (100.0)       | (0.5)                                                                   | (1.0)        | (88.1)            |
| New York City                          | 651          | 640                                 | 626                                                         | (97.8)        | (1.1)                                                                   | (2.2)        | (83.2)            |
| North Carolina                         | 211          | 207                                 | 207                                                         | (100.0)       | (0.0)                                                                   | (1.9)        | (82.6)            |
| North Dakota                           | 26           | 25                                  | 23                                                          | (92.0)        | (0.0)                                                                   | (0.0)        | (91.3)            |
| Ohio                                   | 149          | 145                                 | 143                                                         | (98.6)        | (0.0)                                                                   | (1.4)        | (92.3)            |
| Oklahoma                               | 88           | 86                                  | 85                                                          | (98.8)        | (12.9)                                                                  | (14.1)       | (56.5)            |
| Oregon                                 | 61           | 60                                  | 60                                                          | (100.0)       | (0.0)                                                                   | (1.7)        | (93.3)            |
| Pennsylvania                           | 234          | 228                                 | 227                                                         | (99.6)        | (0.4)                                                                   | (0.4)        | (56.8)            |
| Rhode Island                           | 23           | 23                                  | 23                                                          | (100.0)       | (0.0)                                                                   | (4.3)        | (91.3)            |
| South Carolina                         | 122          | 118                                 | 118                                                         | (100.0)       | (0.8)                                                                   | (2.5)        | (91.5)            |
| South Dakota                           | 19           | 17                                  | 17                                                          | (100.0)       | (0.0)                                                                   | (0.0)        | (29.4)            |
| Tennessee                              | 164          | 161                                 | 161                                                         | (100.0)       | (0.0)                                                                   | (0.6)        | (93.8)            |
| Texas                                  | 1,233        | 1,210                               | 1,203                                                       | (99.4)        | (0.4)                                                                   | (2.2)        | (90.4)            |
| Utah                                   | 37           | 35                                  | 35                                                          | (100.0)       | (0.0)                                                                   | (2.9)        | (85.7)            |
| Vermont                                | 4            | 4                                   | 4                                                           | (100.0)       | (0.0)                                                                   | (0.0)        | (50.0)            |
| Virginia                               | 235          | 226                                 | 226                                                         | (100.0)       | (0.0)                                                                   | (0.0)        | (92.9)            |
| Washington                             | 185          | 179                                 | 178                                                         | (99.4)        | (0.0)                                                                   | (1.1)        | (89.9)            |
| West Virginia                          | 8            | 8                                   | 8                                                           | (100.0)       | (0.0)                                                                   | (0.0)        | (100.0)           |
| Wisconsin                              | 71           | 66                                  | 65                                                          | (98.5)        | (0.0)                                                                   | (3.1)        | (84.6)            |
| Wyoming                                | 3            | 3                                   | 3                                                           | (100.0)       | (0.0)                                                                   | (0.0)        | (100.0)           |
| American Samoa <sup>5</sup>            | 1            | 1                                   | 1                                                           | (100.0)       | (0.0)                                                                   | (0.0)        | (100.0)           |
| Fed. States of Micronesia <sup>5</sup> | 173          | 173                                 | 172                                                         | (99.4)        | (0.0)                                                                   | (0.0)        | (90.7)            |
| Guam <sup>5</sup>                      | 68           | 67                                  | 67                                                          | (100.0)       | (0.0)                                                                   | (9.0)        | (86.6)            |
| Marshall Islands <sup>5</sup>          | 145          | 145                                 | 145                                                         | (100.0)       | (0.0)                                                                   | (0.7)        | (95.2)            |
| N. Mariana Islands <sup>5</sup>        | 21           | 21                                  | 21                                                          | (100.0)       | (0.0)                                                                   | (0.0)        | (76.2)            |
| Puerto Rico <sup>5</sup>               | 71           | 66                                  | 66                                                          | (100.0)       | (1.5)                                                                   | (0.0)        | (95.5)            |
| Republic of Palau <sup>5</sup>         | 4            | 4                                   | 4                                                           | (100.0)       | (0.0)                                                                   | (0.0)        | (100.0)           |
| U.S. Virgin Islands <sup>5</sup>       | 4            | 4                                   | 4                                                           | (100.0)       | (0.0)                                                                   | (0.0)        | (100.0)           |

<sup>1</sup> Includes persons who were alive at diagnosis and started on one or more drug.

<sup>2</sup> Overall U.S. percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>3</sup> I=isoniazid; R=rifampin; Z=pyrazinamide; E=ethambutol. Cases with other drugs prescribed in addition to these regimens are excluded.

<sup>4</sup> Excludes New York City.

<sup>5</sup> Not included in U.S. totals.

**Note:** Excluding cases with no information on drug regimen, 80 (0.83%) persons were not started on any drugs, 24 (0.25%) were started on one drug, and 1,114 (11.50%) had an initial multidrug regimen other than IR, IRZ, or IRZE.

**Table 50. Culture-Positive Tuberculosis Cases and Percentages with Drug-Susceptibility Results, by Resistance to INH or Multidrug Resistance: Reporting Areas, 2012**

| Reporting Area                         | Total Culture Positive Cases | Cases with Initial Drug-Susceptibility Testing Performed <sup>1</sup> | Resistance <sup>2</sup> |     |                                     |    |       |
|----------------------------------------|------------------------------|-----------------------------------------------------------------------|-------------------------|-----|-------------------------------------|----|-------|
|                                        |                              |                                                                       | Isoniazid <sup>1</sup>  |     | Isoniazid and Rifampin <sup>1</sup> |    |       |
|                                        |                              | No.                                                                   | (%)                     | No. | (%)                                 |    |       |
| United States                          | 7,598                        | 7,250                                                                 | (95.4)                  | 660 | (9.1)                               | 83 | (1.1) |
| Alabama                                | 108                          | 108                                                                   | (100.0)                 | 5   | (4.6)                               | 0  | (0.0) |
| Alaska                                 | 50                           | 50                                                                    | (100.0)                 | 1   | (2.0)                               | 0  | (0.0) |
| Arizona                                | 168                          | 165                                                                   | (98.2)                  | 13  | (7.9)                               | 0  | (0.0) |
| Arkansas                               | 36                           | 35                                                                    | (97.2)                  | 6   | (17.1)                              | 0  | (0.0) |
| California                             | 1,737                        | 1,678                                                                 | (96.6)                  | 167 | (10.0)                              | 13 | (0.8) |
| Colorado                               | 47                           | 47                                                                    | (100.0)                 | 3   | (6.4)                               | 1  | (2.1) |
| Connecticut                            | 55                           | 53                                                                    | (96.4)                  | 7   | (13.2)                              | 1  | (1.9) |
| Delaware                               | 18                           | 18                                                                    | (100.0)                 | 1   | (5.6)                               | 0  | (0.0) |
| District of Columbia                   | 28                           | 27                                                                    | (96.4)                  | 1   | (3.7)                               | 0  | (0.0) |
| Florida                                | 539                          | 497                                                                   | (92.2)                  | 40  | (8.0)                               | 6  | (1.2) |
| Georgia                                | 248                          | 245                                                                   | (98.8)                  | 25  | (10.2)                              | 1  | (0.4) |
| Hawaii                                 | 89                           | 88                                                                    | (98.9)                  | 21  | (23.9)                              | 5  | (5.7) |
| Idaho                                  | 10                           | 10                                                                    | (100.0)                 | 3   | (30.0)                              | 0  | (0.0) |
| Illinois                               | 246                          | 236                                                                   | (95.9)                  | 17  | (7.2)                               | 1  | (0.4) |
| Indiana                                | 78                           | 77                                                                    | (98.7)                  | 8   | (10.4)                              | 0  | (0.0) |
| Iowa                                   | 32                           | 29                                                                    | (90.6)                  | 5   | (17.2)                              | 1  | (3.4) |
| Kansas                                 | 40                           | 40                                                                    | (100.0)                 | 0   | (0.0)                               | 0  | (0.0) |
| Kentucky                               | 60                           | 59                                                                    | (98.3)                  | 6   | (10.2)                              | 0  | (0.0) |
| Louisiana                              | 122                          | 105                                                                   | (86.1)                  | 2   | (1.9)                               | 0  | (0.0) |
| Maine                                  | 14                           | 14                                                                    | (100.0)                 | 0   | (0.0)                               | 0  | (0.0) |
| Maryland                               | 161                          | 160                                                                   | (99.4)                  | 9   | (5.6)                               | 1  | (0.6) |
| Massachusetts                          | 153                          | 151                                                                   | (98.7)                  | 13  | (8.6)                               | 2  | (1.3) |
| Michigan                               | 102                          | 101                                                                   | (99.0)                  | 4   | (4.0)                               | 2  | (2.0) |
| Minnesota                              | 124                          | 124                                                                   | (100.0)                 | 12  | (9.7)                               | 1  | (0.8) |
| Mississippi                            | 66                           | 65                                                                    | (98.5)                  | 7   | (10.8)                              | 0  | (0.0) |
| Missouri                               | 89                           | 40                                                                    | (44.9)                  | --  | --                                  | -- | --    |
| Montana                                | 4                            | 4                                                                     | (100.0)                 | 1   | (25.0)                              | 0  | (0.0) |
| Nebraska                               | 14                           | 14                                                                    | (100.0)                 | 0   | (0.0)                               | 0  | (0.0) |
| Nevada                                 | 58                           | 53                                                                    | (91.4)                  | 6   | (11.3)                              | 2  | (3.8) |
| New Hampshire                          | 8                            | 5                                                                     | (62.5)                  | --  | --                                  | -- | --    |
| New Jersey                             | 227                          | 226                                                                   | (99.6)                  | 19  | (8.4)                               | 4  | (1.8) |
| New Mexico                             | 38                           | 38                                                                    | (100.0)                 | 1   | (2.6)                               | 0  | (0.0) |
| New York State <sup>3</sup>            | 161                          | 158                                                                   | (98.1)                  | 14  | (8.9)                               | 3  | (1.9) |
| New York City                          | 492                          | 480                                                                   | (97.6)                  | 53  | (11.0)                              | 16 | (3.3) |
| North Carolina                         | 170                          | 169                                                                   | (99.4)                  | 16  | (9.5)                               | 1  | (0.6) |
| North Dakota                           | 13                           | 0                                                                     | (0.0)                   | --  | --                                  | -- | --    |
| Ohio                                   | 106                          | 105                                                                   | (99.1)                  | 5   | (4.8)                               | 0  | (0.0) |
| Oklahoma                               | 69                           | 63                                                                    | (91.3)                  | 3   | (4.8)                               | 0  | (0.0) |
| Oregon                                 | 49                           | 49                                                                    | (100.0)                 | 5   | (10.2)                              | 1  | (2.0) |
| Pennsylvania                           | 188                          | 178                                                                   | (94.7)                  | 15  | (8.4)                               | 2  | (1.1) |
| Rhode Island                           | 19                           | 19                                                                    | (100.0)                 | 2   | (10.5)                              | 0  | (0.0) |
| South Carolina                         | 84                           | 79                                                                    | (94.0)                  | 7   | (8.9)                               | 0  | (0.0) |
| South Dakota                           | 14                           | 14                                                                    | (100.0)                 | 1   | (7.1)                               | 0  | (0.0) |
| Tennessee                              | 113                          | 113                                                                   | (100.0)                 | 9   | (8.0)                               | 0  | (0.0) |
| Texas                                  | 919                          | 847                                                                   | (92.2)                  | 73  | (8.6)                               | 5  | (0.6) |
| Utah                                   | 28                           | 28                                                                    | (100.0)                 | 2   | (7.1)                               | 1  | (3.6) |
| Vermont                                | 3                            | 3                                                                     | (100.0)                 | 1   | (33.3)                              | 0  | (0.0) |
| Virginia                               | 173                          | 172                                                                   | (99.4)                  | 16  | (9.3)                               | 5  | (2.9) |
| Washington                             | 164                          | 154                                                                   | (93.9)                  | 25  | (16.2)                              | 4  | (2.6) |
| West Virginia                          | 7                            | 6                                                                     | (85.7)                  | 2   | (33.3)                              | 0  | (0.0) |
| Wisconsin                              | 54                           | 48                                                                    | (88.9)                  | 4   | (8.3)                               | 2  | (4.2) |
| Wyoming                                | 3                            | 3                                                                     | (100.0)                 | 0   | (0.0)                               | 0  | (0.0) |
| American Samoa <sup>4</sup>            | 1                            | 1                                                                     | (100.0)                 | 0   | (0.0)                               | 0  | (0.0) |
| Fed. States of Micronesia <sup>4</sup> | 57                           | 40                                                                    | (70.2)                  | --  | --                                  | -- | --    |
| Guam <sup>4</sup>                      | 32                           | 27                                                                    | (84.4)                  | 2   | (7.4)                               | 0  | (0.0) |
| Marshall Islands <sup>4</sup>          | 75                           | 74                                                                    | (98.7)                  | 3   | (4.1)                               | 3  | (4.1) |
| N. Mariana Islands <sup>4</sup>        | 15                           | 14                                                                    | (93.3)                  | 1   | (7.1)                               | 0  | (0.0) |
| Puerto Rico <sup>4</sup>               | 62                           | 54                                                                    | (87.1)                  | 5   | (9.3)                               | 1  | (1.9) |
| Republic of Palau <sup>4</sup>         | 3                            | 0                                                                     | (0.0)                   | --  | --                                  | -- | --    |
| U.S. Virgin Islands <sup>4</sup>       | 2                            | 1                                                                     | (50.0)                  | --  | --                                  | -- | --    |

<sup>1</sup> Patients tested to at least isoniazid and rifampin

<sup>2</sup> Isolates may be resistant to other drugs. Overall U.S. percentage based on 52 reporting areas (50 states, New York City, and the District of Columbia). Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>3</sup> Excludes New York City.

<sup>4</sup> Not included in U.S. totals.

Note: Ellipses indicate data not available.

**Table 51. Tuberculosis Cases and Percentages by HIV Status: Reporting Areas, 2012**

| Reporting Area                         | Total Cases  | Cases with Information on HIV Status <sup>1</sup> |               | Cases in Persons with HIV-Positive Results <sup>2</sup> |              |
|----------------------------------------|--------------|---------------------------------------------------|---------------|---------------------------------------------------------|--------------|
|                                        |              | No.                                               | (%)           | No.                                                     | (%)          |
| <b>United States</b>                   | <b>9,945</b> | <b>8,377</b>                                      | <b>(84.2)</b> | <b>625</b>                                              | <b>(7.5)</b> |
| Alabama                                | 134          | 128                                               | (95.5)        | 7                                                       | (5.5)        |
| Alaska                                 | 66           | 45                                                | (68.2)        | 0                                                       | (0.0)        |
| Arizona                                | 211          | 189                                               | (89.6)        | 11                                                      | (5.8)        |
| Arkansas                               | 70           | 60                                                | (85.7)        | 0                                                       | (0.0)        |
| California                             | 2,191        | 1,851                                             | (84.5)        | 87                                                      | (4.7)        |
| Colorado                               | 64           | 62                                                | (96.9)        | 1                                                       | (1.6)        |
| Connecticut                            | 74           | 64                                                | (86.5)        | 4                                                       | (6.3)        |
| Delaware                               | 28           | 27                                                | (96.4)        | 3                                                       | (11.1)       |
| District of Columbia                   | 37           | 32                                                | (86.5)        | 9                                                       | (28.1)       |
| Florida                                | 679          | 534                                               | (78.6)        | 76                                                      | (14.2)       |
| Georgia                                | 357          | 333                                               | (93.3)        | 38                                                      | (11.4)       |
| Hawaii                                 | 117          | 112                                               | (95.7)        | 1                                                       | (0.9)        |
| Idaho                                  | 15           | 12                                                | (80.0)        | 0                                                       | (0.0)        |
| Illinois                               | 347          | 299                                               | (86.2)        | 18                                                      | (6.0)        |
| Indiana                                | 102          | 81                                                | (79.4)        | 6                                                       | (7.4)        |
| Iowa                                   | 46           | 38                                                | (82.6)        | 5                                                       | (13.2)       |
| Kansas                                 | 42           | 41                                                | (97.6)        | 3                                                       | (7.3)        |
| Kentucky                               | 80           | 73                                                | (91.3)        | 4                                                       | (5.5)        |
| Louisiana                              | 149          | 124                                               | (83.2)        | 10                                                      | (8.1)        |
| Maine                                  | 17           | 17                                                | (100.0)       | 3                                                       | (17.6)       |
| Maryland                               | 224          | 203                                               | (90.6)        | 26                                                      | (12.8)       |
| Massachusetts                          | 215          | 128                                               | (59.5)        | 16                                                      | (12.5)       |
| Michigan                               | 149          | 123                                               | (82.6)        | 7                                                       | (5.7)        |
| Minnesota                              | 162          | 155                                               | (95.7)        | 6                                                       | (3.9)        |
| Mississippi                            | 81           | 78                                                | (96.3)        | 5                                                       | (6.4)        |
| Missouri                               | 89           | 62                                                | (69.7)        | 4                                                       | (6.5)        |
| Montana                                | 5            | 5                                                 | (100.0)       | 0                                                       | (0.0)        |
| Nebraska                               | 22           | 21                                                | (95.5)        | 2                                                       | (9.5)        |
| Nevada                                 | 82           | 79                                                | (96.3)        | 2                                                       | (2.5)        |
| New Hampshire                          | 9            | 9                                                 | (100.0)       | 1                                                       | (11.1)       |
| New Jersey                             | 302          | 237                                               | (78.5)        | 18                                                      | (7.6)        |
| New Mexico                             | 40           | 36                                                | (90.0)        | 2                                                       | (5.6)        |
| New York State <sup>3</sup>            | 215          | 161                                               | (74.9)        | 7                                                       | (4.3)        |
| New York City                          | 651          | 519                                               | (79.7)        | 60                                                      | (11.6)       |
| North Carolina                         | 211          | 201                                               | (95.3)        | 13                                                      | (6.5)        |
| North Dakota                           | 26           | 26                                                | (100.0)       | 1                                                       | (3.8)        |
| Ohio                                   | 149          | 117                                               | (78.5)        | 11                                                      | (9.4)        |
| Oklahoma                               | 88           | 70                                                | (79.5)        | 1                                                       | (1.4)        |
| Oregon                                 | 61           | 60                                                | (98.4)        | 1                                                       | (1.7)        |
| Pennsylvania                           | 234          | 170                                               | (72.6)        | 19                                                      | (11.2)       |
| Rhode Island                           | 23           | 21                                                | (91.3)        | 1                                                       | (4.8)        |
| South Carolina                         | 122          | 110                                               | (90.2)        | 12                                                      | (10.9)       |
| South Dakota                           | 19           | 19                                                | (100.0)       | 2                                                       | (10.5)       |
| Tennessee                              | 164          | 161                                               | (98.2)        | 18                                                      | (11.2)       |
| Texas                                  | 1,233        | 1,004                                             | (81.4)        | 78                                                      | (7.8)        |
| Utah                                   | 37           | 34                                                | (91.9)        | 2                                                       | (5.9)        |
| Vermont                                | 4            | 0                                                 | (0.0)         | 0                                                       | -            |
| Virginia                               | 235          | 224                                               | (95.3)        | 12                                                      | (5.4)        |
| Washington                             | 185          | 162                                               | (87.6)        | 6                                                       | (3.7)        |
| West Virginia                          | 8            | 8                                                 | (100.0)       | 0                                                       | (0.0)        |
| Wisconsin                              | 71           | 50                                                | (70.4)        | 5                                                       | (10.0)       |
| Wyoming                                | 3            | 2                                                 | (66.7)        | 1                                                       | (50.0)       |
| American Samoa <sup>4</sup>            | 1            | 1                                                 | (100.0)       | 0                                                       | (0.0)        |
| Fed. States of Micronesia <sup>4</sup> | 173          | 120                                               | (69.4)        | --                                                      | --           |
| Guam <sup>4</sup>                      | 68           | 44                                                | (64.7)        | --                                                      | --           |
| Marshall Islands <sup>4</sup>          | 145          | 87                                                | (60.0)        | --                                                      | --           |
| N. Mariana Islands <sup>4</sup>        | 21           | 16                                                | (76.2)        | 1                                                       | (6.3)        |
| Puerto Rico <sup>4</sup>               | 71           | 61                                                | (85.9)        | 11                                                      | (18.0)       |
| Republic of Palau <sup>4</sup>         | 4            | 4                                                 | (100.0)       | 0                                                       | (0.0)        |
| U.S. Virgin Islands <sup>4</sup>       | 4            | 4                                                 | (100.0)       | 2                                                       | (50.0)       |

<sup>1</sup> Includes only those cases in persons with negative, positive, or indeterminate HIV test results.

<sup>2</sup> Counts and percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>3</sup> Excludes New York City.

<sup>4</sup> Not included in U.S. totals.

**Note:** Ellipses indicate data not available.

See Technical Notes.

**This page intentionally left blank**

**Table 52. Tuberculosis Diagnostic Tests by Type of Laboratory: Reporting Areas, 2012**

| Reporting Area       | Nucleic Acid Amplification Test |                |                   |               |              |                    | Sputum Culture |                   |               |              |                    |                | Culture of Tissue or Other Fluids |               |              |  |  |  |
|----------------------|---------------------------------|----------------|-------------------|---------------|--------------|--------------------|----------------|-------------------|---------------|--------------|--------------------|----------------|-----------------------------------|---------------|--------------|--|--|--|
|                      | Total <sup>1</sup>              | Commercial Lab | Public Health Lab | Other Lab     | Missing      | Total <sup>2</sup> | Commercial Lab | Public Health Lab | Other Lab     | Missing      | Total <sup>3</sup> | Commercial Lab | Public Health Lab                 | Other Lab     | Missing      |  |  |  |
|                      | No.                             | (%)            | (%)               | (%)           | (%)          | No.                | (%)            | (%)               | (%)           | (%)          | No.                | (%)            | (%)                               | (%)           | (%)          |  |  |  |
| <b>United States</b> | <b>4337</b>                     | <b>(28.5)</b>  | <b>(52.0)</b>     | <b>(12.7)</b> | <b>(6.8)</b> | <b>8050</b>        | <b>(24.8)</b>  | <b>(50.9)</b>     | <b>(14.7)</b> | <b>(9.6)</b> | <b>4590</b>        | <b>(43.2)</b>  | <b>(24.7)</b>                     | <b>(22.5)</b> | <b>(9.7)</b> |  |  |  |
| Alabama              | 33                              | (18.2)         | (69.7)            | (12.1)        | (0.0)        | 122                | (4.9)          | (93.4)            | (0.8)         | (0.8)        | 55                 | (12.7)         | (69.1)                            | (18.2)        | (0.0)        |  |  |  |
| Alaska               | 29                              | (0.0)          | (100.0)           | (0.0)         | (0.0)        | 57                 | (3.5)          | (93.0)            | (3.5)         | (0.0)        | 12                 | (8.3)          | (75.0)                            | (16.7)        | (0.0)        |  |  |  |
| Arizona              | 81                              | (23.5)         | (65.4)            | (8.6)         | (2.5)        | 198                | (12.1)         | (76.8)            | (11.1)        | (0.0)        | 80                 | (37.5)         | (26.3)                            | (36.3)        | (0.0)        |  |  |  |
| Arkansas             | 24                              | (12.5)         | (75.0)            | (12.5)        | (0.0)        | 60                 | (5.0)          | (78.3)            | (15.0)        | (1.7)        | 27                 | (22.2)         | (25.9)                            | (51.9)        | (0.0)        |  |  |  |
| California           | 1018                            | (33.8)         | (48.7)            | (13.3)        | (4.2)        | 1803               | (39.1)         | (43.4)            | (13.3)        | (4.2)        | 1017               | (53.3)         | (23.8)                            | (18.7)        | (4.2)        |  |  |  |
| Colorado             | 24                              | (8.3)          | (33.3)            | (41.7)        | (16.7)       | 51                 | (3.9)          | (37.3)            | (23.5)        | (35.3)       | 38                 | (5.3)          | (7.9)                             | (65.8)        | (21.1)       |  |  |  |
| Connecticut          | 12                              | (41.7)         | (58.3)            | (0.0)         | (0.0)        | 54                 | (50.0)         | (50.0)            | (0.0)         | (0.0)        | 50                 | (54.0)         | (44.0)                            | (2.0)         | (0.0)        |  |  |  |
| Delaware             | 19                              | (5.3)          | (84.2)            | (10.5)        | (0.0)        | 25                 | (20.0)         | (64.0)            | (16.0)        | (0.0)        | 17                 | (41.2)         | (17.6)                            | (41.2)        | (0.0)        |  |  |  |
| District of Columbia | 11                              | (63.6)         | (0.0)             | (36.4)        | (0.0)        | 25                 | (60.0)         | (24.0)            | (16.0)        | (0.0)        | 24                 | (79.2)         | (0.0)                             | (20.8)        | (0.0)        |  |  |  |
| Florida              | 464                             | (12.7)         | (82.5)            | (4.7)         | (0.0)        | 511                | (16.8)         | (80.2)            | (2.9)         | (0.0)        | 255                | (45.1)         | (50.6)                            | (4.3)         | (0.0)        |  |  |  |
| Georgia              | 160                             | (37.5)         | (51.3)            | (6.9)         | (4.4)        | 306                | (33.0)         | (54.9)            | (11.1)        | (1.0)        | 126                | (79.4)         | (15.1)                            | (0.0)         | (5.6)        |  |  |  |
| Hawaii               | 47                              | (97.9)         | (0.0)             | (0.0)         | (2.1)        | 106                | (97.2)         | (0.0)             | (2.8)         | (0.0)        | 49                 | (89.8)         | (0.0)                             | (10.2)        | (0.0)        |  |  |  |
| Idaho                | 10                              | (0.0)          | (100.0)           | (0.0)         | (0.0)        | 13                 | (23.1)         | (76.9)            | (0.0)         | (0.0)        | 5                  | (40.0)         | (60.0)                            | (0.0)         | (0.0)        |  |  |  |
| Illinois             | 140                             | (40.0)         | (50.7)            | (6.4)         | (2.9)        | 261                | (24.5)         | (47.9)            | (25.7)        | (1.9)        | 174                | (48.3)         | (22.4)                            | (28.7)        | (0.6)        |  |  |  |
| Indiana              | 60                              | (21.7)         | (58.3)            | (18.3)        | (1.7)        | 72                 | (13.9)         | (58.3)            | (27.8)        | (0.0)        | 46                 | (41.3)         | (6.5)                             | (50.0)        | (2.2)        |  |  |  |
| Iowa                 | 32                              | (0.0)          | (100.0)           | (0.0)         | (0.0)        | 33                 | (0.0)          | (97.0)            | (3.0)         | (0.0)        | 21                 | (33.3)         | (66.7)                            | (0.0)         | (0.0)        |  |  |  |
| Kansas               | 18                              | (22.2)         | (77.8)            | (0.0)         | (0.0)        | 38                 | (10.5)         | (89.5)            | (0.0)         | (0.0)        | 22                 | (31.8)         | (68.2)                            | (0.0)         | (0.0)        |  |  |  |
| Kentucky             | 50                              | (30.0)         | (56.0)            | (14.0)        | (0.0)        | 70                 | (22.9)         | (62.9)            | (14.3)        | (0.0)        | 45                 | (48.9)         | (31.1)                            | (20.0)        | (0.0)        |  |  |  |
| Louisiana            | 8                               | (25.0)         | (25.0)            | (50.0)        | (0.0)        | 113                | (36.3)         | (43.4)            | (15.9)        | (4.4)        | 48                 | (58.3)         | (14.6)                            | (14.6)        | (12.5)       |  |  |  |
| Maine                | 7                               | (0.0)          | (85.7)            | (14.3)        | (0.0)        | 8                  | (12.5)         | (87.5)            | (0.0)         | (0.0)        | 10                 | (10.0)         | (90.0)                            | (0.0)         | (0.0)        |  |  |  |
| Maryland             | 110                             | (26.4)         | (71.8)            | (1.8)         | (0.0)        | 204                | (9.8)          | (86.3)            | (3.9)         | (0.0)        | 104                | (42.3)         | (45.2)                            | (11.5)        | (1.0)        |  |  |  |
| Massachusetts        | 79                              | (8.9)          | (67.1)            | (0.0)         | (24.1)       | 146                | (16.4)         | (43.8)            | (0.0)         | (39.7)       | 126                | (24.6)         | (46.8)                            | (0.8)         | (27.8)       |  |  |  |
| Michigan             | 61                              | (4.9)          | (75.4)            | (16.4)        | (3.3)        | 109                | (0.0)          | (100.0)           | (0.0)         | (0.0)        | 49                 | (10.2)         | (51.0)                            | (22.4)        | (16.3)       |  |  |  |
| Minnesota            | 56                              | (55.4)         | (44.6)            | (0.0)         | (0.0)        | 113                | (46.0)         | (54.0)            | (0.0)         | (0.0)        | 99                 | (53.5)         | (46.5)                            | (0.0)         | (0.0)        |  |  |  |
| Mississippi          | 65                              | (1.5)          | (0.0)             | (61.5)        | (36.9)       | 75                 | (10.7)         | (0.0)             | (60.0)        | (29.3)       | 46                 | (2.2)          | (0.0)                             | (69.6)        | (28.3)       |  |  |  |
| Missouri             | 24                              | (0.0)          | (0.0)             | (0.0)         | (100.0)      | 77                 | (0.0)          | (0.0)             | (0.0)         | (100.0)      | 61                 | (0.0)          | (0.0)                             | (0.0)         | (100.0)      |  |  |  |
| Montana              | 3                               | (0.0)          | (100.0)           | (0.0)         | (0.0)        | 5                  | (0.0)          | (80.0)            | (20.0)        | (0.0)        | 3                  | (0.0)          | (100.0)                           | (0.0)         | (0.0)        |  |  |  |
| Nebraska             | 11                              | (0.0)          | (45.5)            | (54.5)        | (0.0)        | 14                 | (7.1)          | (42.9)            | (50.0)        | (0.0)        | 10                 | (0.0)          | (20.0)                            | (80.0)        | (0.0)        |  |  |  |
| Nevada               | 34                              | (5.9)          | (94.1)            | (0.0)         | (0.0)        | 67                 | (19.4)         | (64.2)            | (4.5)         | (11.9)       | 21                 | (47.6)         | (38.1)                            | (14.3)        | (0.0)        |  |  |  |
| New Hampshire        | 5                               | (20.0)         | (60.0)            | (0.0)         | (20.0)       | 7                  | (0.0)          | (100.0)           | (0.0)         | (0.0)        | 3                  | (100.0)        | (0.0)                             | (0.0)         | (0.0)        |  |  |  |
| New Jersey           | 88                              | (52.3)         | (3.4)             | (43.2)        | (1.1)        | 241                | (21.6)         | (36.9)            | (40.7)        | (0.8)        | 187                | (40.6)         | (2.7)                             | (56.7)        | (0.0)        |  |  |  |
| New Mexico           | 21                              | (76.2)         | (23.8)            | (0.0)         | (0.0)        | 35                 | (60.0)         | (40.0)            | (0.0)         | (0.0)        | 18                 | (77.8)         | (22.2)                            | (0.0)         | (0.0)        |  |  |  |

**Table 52. (Con't) Tuberculosis Diagnostic Tests by Type of Laboratory: Reporting Areas, 2012**

| Reporting Area                         | Nucleic Acid Amplification Test |                |                   |           |         |                    | Sputum Culture |                   |           |         |                    |                | Culture of Tissue or Other Fluids |           |         |     |     |  |
|----------------------------------------|---------------------------------|----------------|-------------------|-----------|---------|--------------------|----------------|-------------------|-----------|---------|--------------------|----------------|-----------------------------------|-----------|---------|-----|-----|--|
|                                        | Total <sup>1</sup>              | Commercial Lab | Public Health Lab | Other Lab | Missing | Total <sup>2</sup> | Commercial Lab | Public Health Lab | Other Lab | Missing | Total <sup>3</sup> | Commercial Lab | Public Health Lab                 | Other Lab | Missing |     |     |  |
|                                        | No.                             | (%)            | (%)               | (%)       | (%)     | No.                | (%)            | (%)               | (%)       | (%)     | No.                | (%)            | (%)                               | (%)       | (%)     |     |     |  |
| New York State <sup>4</sup>            | 147                             | (23.8)         | (34.7)            | (9.5)     | (32.0)  | 176                | (27.3)         | (26.1)            | (9.7)     | (36.9)  | 125                | (34.4)         | (24.0)                            | (10.4)    | (31.2)  |     |     |  |
| New York City                          | 329                             | (8.5)          | (48.6)            | (23.7)    | (19.1)  | 551                | (7.8)          | (11.6)            | (43.9)    | (36.7)  | 314                | (3.8)          | (10.2)                            | (55.4)    | (30.6)  |     |     |  |
| North Carolina                         | 83                              | (39.8)         | (60.2)            | (0.0)     | (0.0)   | 174                | (20.1)         | (64.9)            | (14.9)    | (0.0)   | 109                | (40.4)         | (18.3)                            | (41.3)    | (0.0)   |     |     |  |
| North Dakota                           | 1                               | (0.0)          | (0.0)             | (0.0)     | (100.0) | 12                 | (8.3)          | (16.7)            | (0.0)     | (75.0)  | 9                  | (11.1)         | (22.2)                            | (0.0)     | (66.7)  |     |     |  |
| Ohio                                   | 62                              | (88.7)         | (11.3)            | (0.0)     | (0.0)   | 121                | (85.1)         | (14.9)            | (0.0)     | (0.0)   | 97                 | (96.9)         | (3.1)                             | (0.0)     | (0.0)   |     |     |  |
| Oklahoma                               | 41                              | (12.2)         | (87.8)            | (0.0)     | (0.0)   | 59                 | (10.2)         | (86.4)            | (3.4)     | (0.0)   | 39                 | (41.0)         | (59.0)                            | (0.0)     | (0.0)   |     |     |  |
| Oregon                                 | 43                              | (2.3)          | (62.8)            | (34.9)    | (0.0)   | 53                 | (9.4)          | (66.0)            | (24.5)    | (0.0)   | 30                 | (13.3)         | (23.3)                            | (63.3)    | (0.0)   |     |     |  |
| Pennsylvania                           | 54                              | (25.9)         | (14.8)            | (5.6)     | (53.7)  | 154                | (20.1)         | (36.4)            | (3.2)     | (40.3)  | 136                | (31.6)         | (13.2)                            | (6.6)     | (48.5)  |     |     |  |
| Rhode Island                           | 8                               | (0.0)          | (100.0)           | (0.0)     | (0.0)   | 17                 | (0.0)          | (94.1)            | (5.9)     | (0.0)   | 16                 | (0.0)          | (100.0)                           | (0.0)     | (0.0)   |     |     |  |
| South Carolina                         | 45                              | (17.8)         | (68.9)            | (13.3)    | (0.0)   | 104                | (11.5)         | (71.2)            | (17.3)    | (0.0)   | 51                 | (45.1)         | (31.4)                            | (23.5)    | (0.0)   |     |     |  |
| South Dakota                           | 15                              | (0.0)          | (100.0)           | (0.0)     | (0.0)   | 14                 | (0.0)          | (100.0)           | (0.0)     | (0.0)   | 9                  | (0.0)          | (100.0)                           | (0.0)     | (0.0)   |     |     |  |
| Tennessee                              | 84                              | (51.2)         | (41.7)            | (7.1)     | (0.0)   | 154                | (14.9)         | (79.2)            | (4.5)     | (1.3)   | 69                 | (50.7)         | (33.3)                            | (14.5)    | (1.4)   |     |     |  |
| Texas                                  | 383                             | (42.8)         | (27.7)            | (25.8)    | (3.7)   | 990                | (15.1)         | (50.6)            | (20.5)    | (13.8)  | 463                | (37.8)         | (18.6)                            | (34.1)    | (9.5)   |     |     |  |
| Utah                                   | 25                              | (16.0)         | (84.0)            | (0.0)     | (0.0)   | 28                 | (35.7)         | (64.3)            | (0.0)     | (0.0)   | 18                 | (94.4)         | (5.6)                             | (0.0)     | (0.0)   |     |     |  |
| Vermont                                | 2                               | (50.0)         | (50.0)            | (0.0)     | (0.0)   | 2                  | (0.0)          | (100.0)           | (0.0)     | (0.0)   | 3                  | (100.0)        | (0.0)                             | (0.0)     | (0.0)   |     |     |  |
| Virginia                               | 65                              | (44.6)         | (47.7)            | (4.6)     | (3.1)   | 209                | (21.1)         | (69.4)            | (6.7)     | (2.9)   | 111                | (51.4)         | (26.1)                            | (19.8)    | (2.7)   |     |     |  |
| Washington                             | 95                              | (31.6)         | (65.3)            | (0.0)     | (3.2)   | 150                | (48.0)         | (40.0)            | (7.3)     | (4.7)   | 101                | (83.2)         | (5.0)                             | (7.9)     | (4.0)   |     |     |  |
| West Virginia                          | 5                               | (0.0)          | (100.0)           | (0.0)     | (0.0)   | 6                  | (0.0)          | (100.0)           | (0.0)     | (0.0)   | 3                  | (0.0)          | (100.0)                           | (0.0)     | (0.0)   |     |     |  |
| Wisconsin                              | 44                              | (13.6)         | (75.0)            | (0.0)     | (11.4)  | 54                 | (11.1)         | (75.9)            | (0.0)     | (13.0)  | 39                 | (61.5)         | (33.3)                            | (2.6)     | (2.6)   |     |     |  |
| Wyoming                                | 2                               | (100.0)        | (0.0)             | (0.0)     | (0.0)   | 3                  | (33.3)         | (33.3)            | (0.0)     | (33.3)  | 0                  | (0.0)          | (0.0)                             | (0.0)     | (0.0)   |     |     |  |
| American Samoa <sup>6</sup>            | 0                               | ...            | ...               | ...       | ...     | 1                  | (100.0)        | (0.0)             | (0.0)     | (0.0)   | 0                  | (0.0)          | (0.0)                             | (0.0)     | (0.0)   | ... | ... |  |
| Fed. States of Micronesia <sup>5</sup> | 24                              | (87.5)         | (0.0)             | (0.0)     | (12.5)  | 142                | (97.9)         | (1.4)             | (0.0)     | (0.7)   | 5                  | (100.0)        | (0.0)                             | (0.0)     | (0.0)   | ... | ... |  |
| Guam <sup>5</sup>                      | 8                               | (100.0)        | (0.0)             | (0.0)     | (0.0)   | 39                 | (92.3)         | (2.6)             | (0.0)     | (5.1)   | 14                 | (100.0)        | (0.0)                             | (0.0)     | (0.0)   | ... | ... |  |
| Marshall Islands <sup>6</sup>          | 32                              | (100.0)        | (0.0)             | (0.0)     | (0.0)   | 117                | (99.1)         | (0.9)             | (0.0)     | (0.0)   | 5                  | (100.0)        | (0.0)                             | (0.0)     | (0.0)   | ... | ... |  |
| N. Mariana Islands <sup>6</sup>        | 0                               | ...            | ...               | ...       | ...     | 21                 | (100.0)        | (0.0)             | (0.0)     | (0.0)   | 0                  | (0.0)          | (0.0)                             | (0.0)     | (0.0)   | ... | ... |  |
| Puerto Rico <sup>5</sup>               | 34                              | (0.0)          | (100.0)           | (0.0)     | (0.0)   | 58                 | (8.6)          | (91.4)            | (0.0)     | (0.0)   | 24                 | (16.7)         | (83.3)                            | (0.0)     | (0.0)   | ... | ... |  |
| Republic of Palau <sup>5</sup>         | 0                               | ...            | ...               | ...       | ...     | 4                  | (100.0)        | (0.0)             | (0.0)     | (0.0)   | 0                  | (0.0)          | (0.0)                             | (0.0)     | (0.0)   | ... | ... |  |
| U.S. Virgin Islands <sup>5</sup>       | 0                               | ...            | ...               | ...       | ...     | 2                  | (50.0)         | (50.0)            | (0.0)     | (0.0)   | 1                  | (100.0)        | (0.0)                             | (0.0)     | (0.0)   | ... | ... |  |

<sup>1</sup> Number of patients with positive or negative NAA test results.

<sup>2</sup> Number of patients with positive or negative sputum culture test results.

<sup>3</sup> Number of patients with positive or negative culture of tissue and other body fluid test results.

<sup>4</sup> Excludes New York City.

<sup>5</sup> Not included in U.S. totals.

**Table 53. Tuberculosis Genotyping Surveillance Coverage<sup>1</sup>: Reporting Areas, 2012**

| Reporting Area                       | Total Cases | Culture Positive Cases | Genotyped Cases | Genotype Surveillance Coverage <sup>2</sup> |
|--------------------------------------|-------------|------------------------|-----------------|---------------------------------------------|
|                                      |             | No.                    | No.             | (%)                                         |
| United States                        | 9,945       | 7,598                  | 7,102           | (93.5)                                      |
| Alabama                              | 134         | 108                    | 108             | (100.0)                                     |
| Alaska                               | 66          | 50                     | 49              | (98.0)                                      |
| Arizona                              | 211         | 168                    | 165             | (98.2)                                      |
| Arkansas                             | 70          | 36                     | 36              | (100.0)                                     |
| California                           | 2,191       | 1,737                  | 1,598           | (91.9)                                      |
| Colorado                             | 64          | 47                     | 47              | (100.0)                                     |
| Connecticut                          | 74          | 55                     | 55              | (100.0)                                     |
| District of Columbia                 | 37          | 28                     | 23              | (82.1)                                      |
| Delaware                             | 28          | 18                     | 15              | (83.3)                                      |
| Florida                              | 679         | 539                    | 535             | (99.3)                                      |
| Georgia                              | 357         | 248                    | 247             | (99.6)                                      |
| Hawaii                               | 117         | 89                     | 87              | (97.8)                                      |
| Idaho                                | 15          | 10                     | 10              | (100.0)                                     |
| Illinois                             | 347         | 246                    | 206             | (83.7)                                      |
| Indiana                              | 102         | 78                     | 76              | (97.4)                                      |
| Iowa                                 | 46          | 32                     | 29              | (90.6)                                      |
| Kansas                               | 42          | 40                     | 33              | (82.5)                                      |
| Kentucky                             | 80          | 60                     | 59              | (98.3)                                      |
| Louisiana                            | 149         | 122                    | 64              | (52.5)                                      |
| Maine                                | 17          | 14                     | 14              | (100.0)                                     |
| Maryland                             | 224         | 161                    | 151             | (93.8)                                      |
| Massachusetts                        | 215         | 153                    | 146             | (95.4)                                      |
| Michigan                             | 149         | 102                    | 100             | (98.0)                                      |
| Minnesota                            | 162         | 124                    | 123             | (99.2)                                      |
| Mississippi                          | 81          | 66                     | 65              | (98.5)                                      |
| Missouri                             | 89          | 89                     | 70              | (78.7)                                      |
| Montana                              | 5           | 4                      | 4               | (100.0)                                     |
| Nebraska                             | 22          | 14                     | 14              | (100.0)                                     |
| Nevada                               | 82          | 58                     | 55              | (94.8)                                      |
| New Hampshire                        | 9           | 8                      | 7               | (87.5)                                      |
| New Jersey                           | 302         | 227                    | 220             | (96.9)                                      |
| New Mexico                           | 40          | 38                     | 36              | (94.7)                                      |
| New York                             | 866         | 653                    | 602             | (92.2)                                      |
| North Carolina                       | 211         | 170                    | 163             | (95.9)                                      |
| North Dakota                         | 26          | 13                     | 13              | (100.0)                                     |
| Ohio                                 | 149         | 106                    | 105             | (99.1)                                      |
| Oklahoma                             | 88          | 69                     | 67              | (97.1)                                      |
| Oregon                               | 61          | 49                     | 49              | (100.0)                                     |
| Pennsylvania                         | 234         | 188                    | 167             | (88.8)                                      |
| Rhode Island                         | 23          | 19                     | 18              | (94.7)                                      |
| South Carolina                       | 122         | 84                     | 72              | (85.7)                                      |
| South Dakota                         | 19          | 14                     | 8               | (57.1)                                      |
| Tennessee                            | 164         | 113                    | 110             | (97.3)                                      |
| Texas                                | 1,233       | 919                    | 859             | (93.5)                                      |
| Utah                                 | 37          | 28                     | 28              | (100.0)                                     |
| Vermont                              | 4           | 3                      | 3               | (100.0)                                     |
| Virginia                             | 235         | 173                    | 169             | (97.7)                                      |
| Washington                           | 185         | 164                    | 160             | (97.6)                                      |
| West Virginia                        | 8           | 7                      | 7               | (100.0)                                     |
| Wisconsin                            | 71          | 54                     | 53              | (98.1)                                      |
| Wyoming                              | 3           | 3                      | 2               | (66.7)                                      |
| American Samoa <sup>3</sup>          | 1           | 1                      | 1               | (100.0)                                     |
| Fed State of Micronesia <sup>3</sup> | 173         | 57                     | 49              | (86.0)                                      |
| Guam <sup>3</sup>                    | 68          | 32                     | 23              | (71.9)                                      |
| Marshall Islands <sup>3</sup>        | 145         | 75                     | 66              | (88.0)                                      |
| N. Mariana Islands <sup>3</sup>      | 21          | 15                     | 0               | 0.0                                         |
| Puerto Rico <sup>3</sup>             | 71          | 62                     | 56              | (90.3)                                      |
| Republic of Palau <sup>3</sup>       | 4           | 3                      | 0               | 0.0                                         |
| U.S. Virgin Islands <sup>3</sup>     | 4           | 2                      | 0               | 0.0                                         |

<sup>1</sup>Genotype surveillance coverage is defined as the percentage of all culture positive tuberculosis (TB) cases for which there was a genotyped isolate.

<sup>2</sup>National TB Performance Indicator goal for national TB genotyping surveillance coverage is 94%.

<sup>3</sup>Not included in U.S. totals.

**Note:** Ellipses indicate data not available.

See Technical Notes.

**Table 54. County-based Tuberculosis Genotype Clusters<sup>1</sup> Based on GENType:  
Reporting Areas, 2010–2012**

| Reporting Area       | Genotyped Cases | Genotype Surveillance Coverage <sup>2</sup> | Clusters     | Clustered Cases | Cluster Size |               |
|----------------------|-----------------|---------------------------------------------|--------------|-----------------|--------------|---------------|
|                      | No.             | (%)                                         | No.          | No.             | Median       | (Range)       |
| <b>United States</b> | <b>22,382</b>   | <b>(92.8)</b>                               | <b>1,542</b> | <b>4,723</b>    | <b>2</b>     | <b>(2–67)</b> |
| Alabama              | 339             | (98.5)                                      | 35           | 109             | 3            | (2–11)        |
| Alaska               | 158             | (97.5)                                      | 18           | 90              | 4            | (2–12)        |
| Arizona              | 550             | (97.7)                                      | 46           | 115             | 2            | (2–9)         |
| Arkansas             | 151             | (99.3)                                      | 11           | 33              | 2            | (2–7)         |
| California           | 4,949           | (90.9)                                      | 391          | 1,200           | 2            | (2–38)        |
| Colorado             | 150             | (100.0)                                     | 6            | 12              | 2            | (2–2)         |
| Connecticut          | 200             | (99.5)                                      | 7            | 19              | 2            | (2–5)         |
| Delaware             | 44              | (84.6)                                      | ...          | ...             | ...          | ...           |
| District of Columbia | 82              | (78.1)                                      | 6            | 13              | 2            | (2–3)         |
| Florida              | 1,703           | (95.8)                                      | 138          | 411             | 2            | (2–67)        |
| Georgia              | 775             | (98.0)                                      | 67           | 213             | 2            | (2–12)        |
| Hawaii               | 233             | (94.7)                                      | 11           | 40              | 2            | (2–8)         |
| Idaho                | 31              | (100.0)                                     | ...          | ...             | ...          | ...           |
| Illinois             | 696             | (87.3)                                      | 46           | 144             | 2            | (2–30)        |
| Indiana              | 208             | (96.7)                                      | 11           | 42              | 2            | (2–17)        |
| Iowa                 | 84              | (92.3)                                      | 1            | 2               | 2            | (2–2)         |
| Kansas               | 106             | (91.4)                                      | 5            | 10              | 2            | (2–2)         |
| Kentucky             | 176             | (94.1)                                      | 10           | 26              | 2            | (2–4)         |
| Louisiana            | 237             | (57.2)                                      | 23           | 62              | 2            | (2–6)         |
| Maine                | 26              | (100.0)                                     | ...          | ...             | ...          | ...           |
| Maryland             | 477             | (97.5)                                      | 20           | 45              | 2            | (2–6)         |
| Massachusetts        | 438             | (93.6)                                      | 15           | 33              | 2            | (2–3)         |
| Michigan             | 342             | (96.6)                                      | 17           | 67              | 3            | (2–18)        |
| Minnesota            | 331             | (99.1)                                      | 17           | 42              | 2            | (2–4)         |
| Mississippi          | 212             | (99.1)                                      | 10           | 40              | 3            | (2–12)        |
| Missouri             | 152             | (64.4)                                      | 14           | 34              | 2            | (2–5)         |
| Montana              | 13              | (92.9)                                      | 1            | 3               | 3            | (3–3)         |
| Nebraska             | 41              | (89.1)                                      | 1            | 2               | 2            | (2–2)         |
| Nevada               | 187             | (94.9)                                      | 10           | 26              | 2            | (2–4)         |
| New Hampshire        | 21              | (80.8)                                      | 3            | 7               | 2            | (2–3)         |
| New Jersey           | 794             | (98.1)                                      | 39           | 98              | 2            | (2–11)        |
| New Mexico           | 122             | (97.6)                                      | 5            | 11              | 2            | (2–3)         |
| New York             | 1,893           | (94.8)                                      | 118          | 308             | 2            | (2–8)         |
| North Carolina       | 547             | (96.3)                                      | 40           | 122             | 2            | (2–11)        |
| North Dakota         | 23              | (95.8)                                      | 1            | 9               | 9            | (9–9)         |
| Ohio                 | 351             | (97.2)                                      | 20           | 62              | 3            | (2–6)         |
| Oklahoma             | 184             | (94.4)                                      | 16           | 42              | 2            | (2–6)         |
| Oregon               | 168             | (100.0)                                     | 11           | 23              | 2            | (2–3)         |
| Pennsylvania         | 440             | (75.9)                                      | 16           | 45              | 2            | (2–6)         |
| Rhode Island         | 56              | (96.6)                                      | 4            | 9               | 2            | (2–3)         |
| South Carolina       | 245             | (80.9)                                      | 20           | 66              | 2            | (2–10)        |
| South Dakota         | 23              | (74.2)                                      | 1            | 6               | 6            | (6–6)         |
| Tennessee            | 341             | (95.5)                                      | 23           | 85              | 2            | (2–16)        |
| Texas                | 2,755           | (93.6)                                      | 219          | 818             | 2            | (2–52)        |
| Utah                 | 70              | (100.0)                                     | 2            | 4               | 2            | (2–2)         |
| Vermont              | 13              | (100.0)                                     | ...          | ...             | ...          | ...           |
| Virginia             | 542             | (96.1)                                      | 25           | 63              | 2            | (2–7)         |
| Washington           | 504             | (96.7)                                      | 29           | 77              | 2            | (2–10)        |
| West Virginia        | 31              | (96.9)                                      | ...          | ...             | ...          | ...           |
| Wisconsin            | 158             | (98.1)                                      | 13           | 35              | 2            | (2–4)         |
| Wyoming              | 9               | (90.0)                                      | ...          | ...             | ...          | ...           |

<sup>1</sup> Clusters are two or more cases with matching spoligotype and 24-locus locus mycobacterial interspersed repetitive unit-variable number tandem repeat type (GENType) within a county during the specified 3-year time period (Total number of clusters from 2010–2012=1,542)

<sup>2</sup> Genotype surveillance coverage is defined as the percentage of all culture positive tuberculosis (TB) cases for which there was a genotyped isolate.

**Note:** Ellipses indicate data not available.

See Technical Notes.



# **Morbidity Tables Reporting Areas, 2010**

**Table 55. Tuberculosis Cases and Percentages by Type of Health Care Provider:  
Reporting Areas, 2010<sup>1</sup>**

| Reporting Area                         | Total         | Cases         | Cases in Persons Alive at Diagnosis | Cases with Information on Type of Health Care Provider |               | Percentage of Cases by Type of Health Care Provider <sup>2</sup> |               |                                      |
|----------------------------------------|---------------|---------------|-------------------------------------|--------------------------------------------------------|---------------|------------------------------------------------------------------|---------------|--------------------------------------|
|                                        |               |               |                                     | No.                                                    | (%)           | Health Department                                                | Private/Other | Both Health Dep't. and Private/Other |
| <b>United States</b>                   | <b>11,163</b> | <b>10,903</b> | <b>10,517</b>                       | <b>(96.5)</b>                                          | <b>(69.0)</b> | <b>(24.5)</b>                                                    | <b>(6.5)</b>  |                                      |
| Alabama                                | 146           | 142           | 142                                 | (100.0)                                                | (85.2)        | (14.1)                                                           | (0.7)         |                                      |
| Alaska                                 | 57            | 56            | 56                                  | (100.0)                                                | (67.9)        | (26.8)                                                           | (5.4)         |                                      |
| Arizona                                | 282           | 279           | 253                                 | (90.7)                                                 | (73.1)        | (25.7)                                                           | (1.2)         |                                      |
| Arkansas                               | 78            | 78            | 72                                  | (92.3)                                                 | (88.9)        | (11.1)                                                           | (0.0)         |                                      |
| California                             | 2,326         | 2,269         | 2,225                               | (98.1)                                                 | (56.4)        | (34.7)                                                           | (8.9)         |                                      |
| Colorado                               | 71            | 71            | 71                                  | (100.0)                                                | (91.5)        | (8.5)                                                            | (0.0)         |                                      |
| Connecticut                            | 85            | 84            | 84                                  | (100.0)                                                | (19.0)        | (26.2)                                                           | (54.8)        |                                      |
| Delaware                               | 20            | 20            | 20                                  | (100.0)                                                | (95.0)        | (5.0)                                                            | (0.0)         |                                      |
| District of Columbia                   | 43            | 41            | 41                                  | (100.0)                                                | (78.0)        | (22.0)                                                           | (0.0)         |                                      |
| Florida                                | 833           | 811           | 809                                 | (99.8)                                                 | (70.7)        | (29.2)                                                           | (0.1)         |                                      |
| Georgia                                | 411           | 399           | 372                                 | (93.2)                                                 | (80.1)        | (19.1)                                                           | (0.8)         |                                      |
| Hawaii                                 | 115           | 115           | 114                                 | (99.1)                                                 | (75.4)        | (24.6)                                                           | (0.0)         |                                      |
| Idaho                                  | 15            | 14            | 13                                  | (92.9)                                                 | (38.5)        | (61.5)                                                           | (0.0)         |                                      |
| Illinois                               | 372           | 364           | 360                                 | (98.9)                                                 | (46.9)        | (14.7)                                                           | (38.3)        |                                      |
| Indiana                                | 90            | 89            | 89                                  | (100.0)                                                | (84.3)        | (11.2)                                                           | (4.5)         |                                      |
| Iowa                                   | 48            | 47            | 43                                  | (91.5)                                                 | (0.0)         | (100.0)                                                          | (0.0)         |                                      |
| Kansas                                 | 46            | 44            | 41                                  | (93.2)                                                 | (92.7)        | (7.3)                                                            | (0.0)         |                                      |
| Kentucky                               | 90            | 89            | 74                                  | (83.1)                                                 | (91.9)        | (8.1)                                                            | (0.0)         |                                      |
| Louisiana                              | 200           | 198           | 196                                 | (99.0)                                                 | (88.8)        | (10.7)                                                           | (0.5)         |                                      |
| Maine                                  | 8             | 8             | 8                                   | (100.0)                                                | (0.0)         | (100.0)                                                          | (0.0)         |                                      |
| Maryland                               | 220           | 216           | 211                                 | (97.7)                                                 | (89.6)        | (10.4)                                                           | (0.0)         |                                      |
| Massachusetts                          | 222           | 219           | 200                                 | (91.3)                                                 | (81.0)        | (14.0)                                                           | (5.0)         |                                      |
| Michigan                               | 183           | 172           | 157                                 | (91.3)                                                 | (78.3)        | (21.7)                                                           | (0.0)         |                                      |
| Minnesota                              | 135           | 133           | 133                                 | (100.0)                                                | (66.2)        | (33.1)                                                           | (0.8)         |                                      |
| Mississippi                            | 116           | 115           | 115                                 | (100.0)                                                | (93.9)        | (5.2)                                                            | (0.9)         |                                      |
| Missouri                               | 107           | 102           | 0                                   | (0.0)                                                  | --            | --                                                               | --            |                                      |
| Montana                                | 6             | 6             | 6                                   | (100.0)                                                | (16.7)        | (83.3)                                                           | (0.0)         |                                      |
| Nebraska                               | 27            | 27            | 26                                  | (96.3)                                                 | (34.6)        | (61.5)                                                           | (3.8)         |                                      |
| Nevada                                 | 114           | 114           | 103                                 | (90.4)                                                 | (98.1)        | (1.9)                                                            | (0.0)         |                                      |
| New Hampshire                          | 10            | 9             | 9                                   | (100.0)                                                | (22.2)        | (77.8)                                                           | (0.0)         |                                      |
| New Jersey                             | 405           | 398           | 396                                 | (99.5)                                                 | (77.8)        | (21.5)                                                           | (0.8)         |                                      |
| New Mexico                             | 50            | 45            | 44                                  | (97.8)                                                 | (68.2)        | (31.8)                                                           | (0.0)         |                                      |
| New York State <sup>3</sup>            | 243           | 239           | 231                                 | (96.7)                                                 | (68.8)        | (30.3)                                                           | (0.9)         |                                      |
| New York City                          | 706           | 692           | 691                                 | (99.9)                                                 | (34.2)        | (45.6)                                                           | (20.3)        |                                      |
| North Carolina                         | 296           | 292           | 280                                 | (95.9)                                                 | (97.1)        | (2.5)                                                            | (0.4)         |                                      |
| North Dakota                           | 9             | 9             | 1                                   | (11.1)                                                 | --            | --                                                               | --            |                                      |
| Ohio                                   | 190           | 184           | 169                                 | (91.8)                                                 | (83.4)        | (15.4)                                                           | (1.2)         |                                      |
| Oklahoma                               | 86            | 85            | 85                                  | (100.0)                                                | (89.4)        | (5.9)                                                            | (4.7)         |                                      |
| Oregon                                 | 87            | 83            | 83                                  | (100.0)                                                | (45.8)        | (21.7)                                                           | (32.5)        |                                      |
| Pennsylvania                           | 238           | 230           | 229                                 | (99.6)                                                 | (79.9)        | (19.2)                                                           | (0.9)         |                                      |
| Rhode Island                           | 26            | 25            | 25                                  | (100.0)                                                | (96.0)        | (4.0)                                                            | (0.0)         |                                      |
| South Carolina                         | 153           | 148           | 148                                 | (100.0)                                                | (89.9)        | (10.1)                                                           | (0.0)         |                                      |
| South Dakota                           | 15            | 14            | 14                                  | (100.0)                                                | (35.7)        | (64.3)                                                           | (0.0)         |                                      |
| Tennessee                              | 193           | 185           | 185                                 | (100.0)                                                | (89.2)        | (9.2)                                                            | (1.6)         |                                      |
| Texas                                  | 1,381         | 1,346         | 1,308                               | (97.2)                                                 | (76.1)        | (17.8)                                                           | (6.0)         |                                      |
| Utah                                   | 20            | 20            | 20                                  | (100.0)                                                | (100.0)       | (0.0)                                                            | (0.0)         |                                      |
| Vermont                                | 5             | 5             | 5                                   | (100.0)                                                | (100.0)       | (0.0)                                                            | (0.0)         |                                      |
| Virginia                               | 268           | 260           | 258                                 | (99.2)                                                 | (70.9)        | (28.3)                                                           | (0.8)         |                                      |
| Washington                             | 239           | 236           | 232                                 | (98.3)                                                 | (68.5)        | (27.6)                                                           | (3.9)         |                                      |
| West Virginia                          | 15            | 14            | 14                                  | (100.0)                                                | (64.3)        | (35.7)                                                           | (0.0)         |                                      |
| Wisconsin                              | 55            | 55            | 52                                  | (94.5)                                                 | (94.2)        | (5.8)                                                            | (0.0)         |                                      |
| Wyoming                                | 7             | 7             | 4                                   | (57.1)                                                 | --            | --                                                               | --            |                                      |
| American Samoa <sup>4</sup>            | 3             | 3             | 1                                   | (33.3)                                                 | --            | --                                                               | --            |                                      |
| Fed. States of Micronesia <sup>4</sup> | 172           | 172           | 143                                 | (83.1)                                                 | (93.7)        | (6.3)                                                            | (0.0)         |                                      |
| Guam <sup>4</sup>                      | 102           | 98            | 95                                  | (96.9)                                                 | (96.8)        | (3.2)                                                            | (0.0)         |                                      |
| Marshall Islands <sup>4</sup>          | 211           | 208           | 84                                  | (40.4)                                                 | --            | --                                                               | --            |                                      |
| N. Mariana Islands <sup>4</sup>        | 32            | 30            | 30                                  | (100.0)                                                | (100.0)       | (0.0)                                                            | (0.0)         |                                      |
| Puerto Rico <sup>4</sup>               | 80            | 78            | 78                                  | (100.0)                                                | (96.2)        | (3.8)                                                            | (0.0)         |                                      |
| Republic of Palau <sup>4</sup>         | 17            | 17            | 10                                  | (58.8)                                                 | --            | --                                                               | --            |                                      |
| U.S. Virgin Islands <sup>4</sup>       | ...           | ...           | 0                                   | ...                                                    | ...           | ...                                                              | ...           |                                      |

<sup>1</sup> Most recent year for which data are available.

<sup>2</sup> Health Department: All outpatient care provided by the state or local health department; Private/Other: All care (except contact investigation and dispensing of medication) provided by non-health department providers; Both Health Department and Private/Other: Both sectors involved in the care of the patient. Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>3</sup> Excludes New York City.

<sup>4</sup> Not included in U.S. totals.

**Table 56. Tuberculosis Cases and Percentages by Directly Observed Therapy (DOT): Reporting Areas, 2010<sup>1</sup>**

| Reporting Area                         | Total Cases   | Cases with Initial Drug Regimen Prescribed <sup>2</sup> | Cases with Information on Directly Observed Therapy |               | Percentage of Cases by Directly Observed Therapy <sup>3</sup> |                                |
|----------------------------------------|---------------|---------------------------------------------------------|-----------------------------------------------------|---------------|---------------------------------------------------------------|--------------------------------|
|                                        |               |                                                         | No.                                                 | (%)           | DOT Only                                                      | Both DOT and Self-Administered |
| <b>United States</b>                   | <b>11,163</b> | <b>10,824</b>                                           | <b>10,662</b>                                       | <b>(98.5)</b> | <b>(59.1)</b>                                                 | <b>(31.1)</b>                  |
| Alabama                                | 146           | 142                                                     | 142                                                 | (100.0)       | (47.2)                                                        | (51.4)                         |
| Alaska                                 | 57            | 56                                                      | 55                                                  | (98.2)        | (94.5)                                                        | (1.8)                          |
| Arizona                                | 282           | 269                                                     | 263                                                 | (97.8)        | (81.0)                                                        | (13.7)                         |
| Arkansas                               | 78            | 78                                                      | 77                                                  | (98.7)        | (26.0)                                                        | (37.7)                         |
| California                             | 2,326         | 2,248                                                   | 2,208                                               | (98.2)        | (50.6)                                                        | (35.4)                         |
| Colorado                               | 71            | 71                                                      | 71                                                  | (100.0)       | (81.7)                                                        | (16.9)                         |
| Connecticut                            | 85            | 84                                                      | 83                                                  | (98.8)        | (15.7)                                                        | (57.8)                         |
| Delaware                               | 20            | 20                                                      | 20                                                  | (100.0)       | (35.0)                                                        | (65.0)                         |
| District of Columbia                   | 43            | 40                                                      | 40                                                  | (100.0)       | (80.0)                                                        | (0.0)                          |
| Florida                                | 833           | 806                                                     | 805                                                 | (99.9)        | (33.0)                                                        | (61.1)                         |
| Georgia                                | 411           | 397                                                     | 381                                                 | (96.0)        | (85.8)                                                        | (13.4)                         |
| Hawaii                                 | 115           | 114                                                     | 114                                                 | (100.0)       | (44.7)                                                        | (43.9)                         |
| Idaho                                  | 15            | 14                                                      | 13                                                  | (92.9)        | (30.8)                                                        | (23.1)                         |
| Illinois                               | 372           | 360                                                     | 358                                                 | (99.4)        | (36.3)                                                        | (50.3)                         |
| Indiana                                | 90            | 89                                                      | 89                                                  | (100.0)       | (79.8)                                                        | (18.0)                         |
| Iowa                                   | 48            | 47                                                      | 47                                                  | (100.0)       | (72.3)                                                        | (19.1)                         |
| Kansas                                 | 46            | 44                                                      | 44                                                  | (100.0)       | (90.9)                                                        | (6.8)                          |
| Kentucky                               | 90            | 88                                                      | 73                                                  | (83.0)        | (84.9)                                                        | (15.1)                         |
| Louisiana                              | 200           | 198                                                     | 194                                                 | (98.0)        | (52.1)                                                        | (27.8)                         |
| Maine                                  | 8             | 8                                                       | 8                                                   | (100.0)       | (37.5)                                                        | (62.5)                         |
| Maryland                               | 220           | 216                                                     | 212                                                 | (98.1)        | (82.5)                                                        | (13.7)                         |
| Massachusetts                          | 222           | 218                                                     | 216                                                 | (99.1)        | (50.0)                                                        | (33.8)                         |
| Michigan                               | 183           | 170                                                     | 167                                                 | (98.2)        | (35.3)                                                        | (64.7)                         |
| Minnesota                              | 135           | 133                                                     | 133                                                 | (100.0)       | (83.5)                                                        | (15.8)                         |
| Mississippi                            | 116           | 115                                                     | 115                                                 | (100.0)       | (64.3)                                                        | (34.8)                         |
| Missouri                               | 107           | 100                                                     | 97                                                  | (97.0)        | (50.5)                                                        | (35.1)                         |
| Montana                                | 6             | 6                                                       | 6                                                   | (100.0)       | (100.0)                                                       | (0.0)                          |
| Nebraska                               | 27            | 27                                                      | 27                                                  | (100.0)       | (55.6)                                                        | (37.0)                         |
| Nevada                                 | 114           | 114                                                     | 109                                                 | (95.6)        | (83.5)                                                        | (16.5)                         |
| New Hampshire                          | 10            | 9                                                       | 9                                                   | (100.0)       | (77.8)                                                        | (22.2)                         |
| New Jersey                             | 405           | 397                                                     | 396                                                 | (99.7)        | (56.3)                                                        | (21.2)                         |
| New Mexico                             | 50            | 45                                                      | 45                                                  | (100.0)       | (82.2)                                                        | (13.3)                         |
| New York State <sup>4</sup>            | 243           | 239                                                     | 239                                                 | (100.0)       | (22.2)                                                        | (75.3)                         |
| New York City                          | 706           | 687                                                     | 684                                                 | (99.6)        | (29.2)                                                        | (42.8)                         |
| North Carolina                         | 296           | 292                                                     | 292                                                 | (100.0)       | (96.9)                                                        | (3.1)                          |
| North Dakota                           | 9             | 9                                                       | 5                                                   | (55.6)        | --                                                            | --                             |
| Ohio                                   | 190           | 183                                                     | 179                                                 | (97.8)        | (71.5)                                                        | (16.2)                         |
| Oklahoma                               | 86            | 83                                                      | 83                                                  | (100.0)       | (28.9)                                                        | (69.9)                         |
| Oregon                                 | 87            | 83                                                      | 83                                                  | (100.0)       | (86.7)                                                        | (13.3)                         |
| Pennsylvania                           | 238           | 229                                                     | 229                                                 | (100.0)       | (72.1)                                                        | (18.3)                         |
| Rhode Island                           | 26            | 25                                                      | 25                                                  | (100.0)       | (8.0)                                                         | (92.0)                         |
| South Carolina                         | 153           | 147                                                     | 147                                                 | (100.0)       | (93.2)                                                        | (5.4)                          |
| South Dakota                           | 15            | 14                                                      | 14                                                  | (100.0)       | (78.6)                                                        | (14.3)                         |
| Tennessee                              | 193           | 184                                                     | 184                                                 | (100.0)       | (94.0)                                                        | (6.0)                          |
| Texas                                  | 1,381         | 1,333                                                   | 1,300                                               | (97.5)        | (76.8)                                                        | (20.7)                         |
| Utah                                   | 20            | 20                                                      | 20                                                  | (100.0)       | (85.0)                                                        | (15.0)                         |
| Vermont                                | 5             | 5                                                       | 5                                                   | (100.0)       | (60.0)                                                        | (20.0)                         |
| Virginia                               | 268           | 259                                                     | 252                                                 | (97.3)        | (94.0)                                                        | (4.4)                          |
| Washington                             | 239           | 234                                                     | 230                                                 | (98.3)        | (63.5)                                                        | (14.8)                         |
| West Virginia                          | 15            | 14                                                      | 14                                                  | (100.0)       | (92.9)                                                        | (7.1)                          |
| Wisconsin                              | 55            | 54                                                      | 53                                                  | (98.1)        | (28.3)                                                        | (67.9)                         |
| Wyoming                                | 7             | 7                                                       | 7                                                   | (100.0)       | (14.3)                                                        | (57.1)                         |
| American Samoa <sup>5</sup>            | 3             | 3                                                       | 3                                                   | (100.0)       | (66.7)                                                        | (33.3)                         |
| Fed. States of Micronesia <sup>5</sup> | 172           | 172                                                     | 167                                                 | (97.1)        | (82.6)                                                        | (16.8)                         |
| Guam <sup>5</sup>                      | 102           | 98                                                      | 97                                                  | (99.0)        | (100.0)                                                       | (0.0)                          |
| Marshall Islands <sup>5</sup>          | 211           | 207                                                     | 87                                                  | (42.0)        | --                                                            | --                             |
| N. Mariana Islands <sup>5</sup>        | 32            | 30                                                      | 30                                                  | (100.0)       | (100.0)                                                       | (0.0)                          |
| Puerto Rico <sup>5</sup>               | 80            | 78                                                      | 78                                                  | (100.0)       | (75.6)                                                        | (2.6)                          |
| Republic of Palau <sup>5</sup>         | 17            | 17                                                      | 10                                                  | (58.8)        | --                                                            | --                             |
| U.S. Virgin Islands <sup>5</sup>       | ...           | ...                                                     | ...                                                 | ...           | ...                                                           | ...                            |

<sup>1</sup> Most recent year for which data are available.

<sup>2</sup> Includes persons alive at diagnosis with an initial drug regimen of one or more drugs prescribed.

<sup>3</sup> Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for ≥75% of cases.

<sup>4</sup> Excludes New York City.

<sup>5</sup> Not included in U.S. totals.

**Note:** Ellipses indicate data not available.

**Table 57. Tuberculosis Cases and Percentages by Reason Therapy Stopped: Reporting Areas, 2010<sup>1</sup>**

| Reporting Area       | Cases with Initial Drug Regimen Prescribed <sup>2</sup> | Completed Therapy |               | Adverse Event |              | Lost       |              | Refused   |              | Died <sup>3</sup> |              | Unknown <sup>4</sup> |              |
|----------------------|---------------------------------------------------------|-------------------|---------------|---------------|--------------|------------|--------------|-----------|--------------|-------------------|--------------|----------------------|--------------|
|                      |                                                         | No.               | (%)           | No.           | (%)          | No.        | (%)          | No.       | (%)          | No.               | (%)          | No.                  | (%)          |
| <b>United States</b> | <b>10,824</b>                                           | <b>9,488</b>      | <b>(87.7)</b> | <b>29</b>     | <b>(0.3)</b> | <b>172</b> | <b>(1.6)</b> | <b>66</b> | <b>(0.6)</b> | <b>641</b>        | <b>(5.9)</b> | <b>428</b>           | <b>(4.0)</b> |
| Alabama              | 142                                                     | 122               | (85.9)        | 1             | (0.7)        | 2          | (1.4)        | 2         | (1.4)        | 15                | (10.6)       | 0                    | (0.0)        |
| Alaska               | 56                                                      | 51                | (91.1)        | 0             | (0.0)        | 0          | (0.0)        | 0         | (0.0)        | 4                 | (7.1)        | 1                    | (1.8)        |
| Arizona              | 269                                                     | 216               | (80.3)        | 1             | (0.4)        | 10         | (3.7)        | 2         | (0.7)        | 8                 | (3.0)        | 32                   | (11.9)       |
| Arkansas             | 78                                                      | 69                | (88.5)        | 0             | (0.0)        | 1          | (1.3)        | 2         | (2.6)        | 2                 | (2.6)        | 4                    | (5.1)        |
| California           | 2,248                                                   | 1,937             | (86.2)        | 6             | (0.3)        | 28         | (1.2)        | 15        | (0.7)        | 134               | (6.0)        | 128                  | (5.7)        |
| Colorado             | 71                                                      | 66                | (93.0)        | 0             | (0.0)        | 0          | (0.0)        | 0         | (0.0)        | 5                 | (7.0)        | 0                    | (0.0)        |
| Connecticut          | 84                                                      | 73                | (86.9)        | 0             | (0.0)        | 1          | (1.2)        | 1         | (1.2)        | 6                 | (7.1)        | 3                    | (3.6)        |
| Delaware             | 20                                                      | 17                | (85.0)        | 0             | (0.0)        | 1          | (5.0)        | 0         | (0.0)        | 1                 | (5.0)        | 1                    | (5.0)        |
| District of Columbia | 40                                                      | 30                | (75.0)        | 0             | (0.0)        | 2          | (5.0)        | 0         | (0.0)        | 2                 | (5.0)        | 6                    | (15.0)       |
| Florida              | 806                                                     | 727               | (90.2)        | 1             | (0.1)        | 11         | (1.4)        | 0         | (0.0)        | 53                | (6.6)        | 14                   | (1.7)        |
| Georgia              | 397                                                     | 345               | (86.9)        | 3             | (0.8)        | 7          | (1.8)        | 2         | (0.5)        | 22                | (5.5)        | 18                   | (4.5)        |
| Hawaii               | 114                                                     | 106               | (93.0)        | 0             | (0.0)        | 3          | (2.6)        | 0         | (0.0)        | 5                 | (4.4)        | 0                    | (0.0)        |
| Idaho                | 14                                                      | 13                | (92.9)        | 0             | (0.0)        | 1          | (7.1)        | 0         | (0.0)        | 0                 | (0.0)        | 0                    | (0.0)        |
| Illinois             | 360                                                     | 320               | (88.9)        | 1             | (0.3)        | 10         | (2.8)        | 6         | (1.7)        | 21                | (5.8)        | 2                    | (0.6)        |
| Indiana              | 89                                                      | 81                | (91.0)        | 0             | (0.0)        | 1          | (1.1)        | 1         | (1.1)        | 5                 | (5.6)        | 1                    | (1.1)        |
| Iowa                 | 47                                                      | 40                | (85.1)        | 0             | (0.0)        | 0          | (0.0)        | 2         | (4.3)        | 3                 | (6.4)        | 2                    | (4.3)        |
| Kansas               | 44                                                      | 41                | (93.2)        | 0             | (0.0)        | 0          | (0.0)        | 0         | (0.0)        | 3                 | (6.8)        | 0                    | (0.0)        |
| Kentucky             | 88                                                      | 75                | (85.2)        | 0             | (0.0)        | 1          | (1.1)        | 0         | (0.0)        | 8                 | (9.1)        | 4                    | (4.5)        |
| Louisiana            | 198                                                     | 168               | (84.8)        | 3             | (1.5)        | 7          | (3.5)        | 2         | (1.0)        | 12                | (6.1)        | 6                    | (3.0)        |
| Maine                | 8                                                       | 6                 | (75.0)        | 0             | (0.0)        | 1          | (12.5)       | 0         | (0.0)        | 1                 | (12.5)       | 0                    | (0.0)        |
| Maryland             | 216                                                     | 192               | (88.9)        | 2             | (0.9)        | 3          | (1.4)        | 0         | (0.0)        | 16                | (7.4)        | 3                    | (1.4)        |
| Massachusetts        | 218                                                     | 193               | (88.5)        | 0             | (0.0)        | 1          | (0.5)        | 2         | (0.9)        | 6                 | (2.8)        | 16                   | (7.3)        |
| Michigan             | 170                                                     | 150               | (88.2)        | 0             | (0.0)        | 5          | (2.9)        | 1         | (0.6)        | 12                | (7.1)        | 2                    | (1.2)        |
| Minnesota            | 133                                                     | 126               | (94.7)        | 0             | (0.0)        | 0          | (0.0)        | 2         | (1.5)        | 4                 | (3.0)        | 1                    | (0.8)        |
| Mississippi          | 115                                                     | 106               | (92.2)        | 0             | (0.0)        | 1          | (0.9)        | 0         | (0.0)        | 7                 | (6.1)        | 1                    | (0.9)        |
| Missouri             | 100                                                     | 84                | (84.0)        | 0             | (0.0)        | 0          | (0.0)        | 0         | (0.0)        | 3                 | (3.0)        | 13                   | (13.0)       |
| Montana              | 6                                                       | 6                 | (100.0)       | 0             | (0.0)        | 0          | (0.0)        | 0         | (0.0)        | 0                 | (0.0)        | 0                    | (0.0)        |
| Nebraska             | 27                                                      | 26                | (96.3)        | 0             | (0.0)        | 0          | (0.0)        | 0         | (0.0)        | 1                 | (3.7)        | 0                    | (0.0)        |
| Nevada               | 114                                                     | 104               | (91.2)        | 0             | (0.0)        | 0          | (0.0)        | 0         | (0.0)        | 3                 | (2.6)        | 7                    | (6.1)        |
| New Hampshire        | 9                                                       | 8                 | (88.9)        | 0             | (0.0)        | 0          | (0.0)        | 0         | (0.0)        | 1                 | (11.1)       | 0                    | (0.0)        |
| New Jersey           | 397                                                     | 357               | (89.9)        | 1             | (0.3)        | 6          | (1.5)        | 1         | (0.3)        | 22                | (5.5)        | 10                   | (2.5)        |
| New Mexico           | 45                                                      | 40                | (88.9)        | 0             | (0.0)        | 0          | (0.0)        | 0         | (0.0)        | 4                 | (8.9)        | 1                    | (2.2)        |

**Table 57. (Con't) Tuberculosis Cases and Percentages by Reason Therapy Stopped: Reporting Areas, 2010<sup>1</sup>**

| Reporting Area                         | Cases with Initial Drug Prescribed <sup>2</sup> | Completed Therapy |         | Adverse Event |       | Lost |       | Did Not Complete Therapy |       | Died <sup>3</sup> |        | Unknown <sup>4</sup> |        |
|----------------------------------------|-------------------------------------------------|-------------------|---------|---------------|-------|------|-------|--------------------------|-------|-------------------|--------|----------------------|--------|
|                                        |                                                 | No.               | (%)     | No.           | (%)   | No.  | (%)   | No.                      | (%)   | No.               | (%)    | No.                  | (%)    |
| New York State <sup>5</sup>            | 239                                             | 220               | (92.1)  | 0             | (0.0) | 1    | (0.4) | 0                        | (0.0) | 13                | (5.4)  | 5                    | (2.1)  |
| New York City                          | 687                                             | 624               | (90.8)  | 2             | (0.3) | 14   | (2.0) | 3                        | (0.4) | 33                | (4.8)  | 11                   | (1.6)  |
| North Carolina                         | 292                                             | 276               | (94.5)  | 0             | (0.0) | 4    | (1.4) | 0                        | (0.0) | 10                | (3.4)  | 2                    | (0.7)  |
| North Dakota                           | 9                                               | 8                 | (88.9)  | 0             | (0.0) | 0    | (0.0) | 0                        | (0.0) | 1                 | (11.1) | 0                    | (0.0)  |
| Ohio                                   | 183                                             | 159               | (86.9)  | 0             | (0.0) | 3    | (1.6) | 2                        | (1.1) | 14                | (7.7)  | 5                    | (2.7)  |
| Oklahoma                               | 83                                              | 77                | (92.8)  | 0             | (0.0) | 0    | (0.0) | 1                        | (1.2) | 4                 | (4.8)  | 1                    | (1.2)  |
| Oregon                                 | 83                                              | 78                | (94.0)  | 0             | (0.0) | 0    | (0.0) | 0                        | (0.0) | 3                 | (3.6)  | 2                    | (2.4)  |
| Pennsylvania                           | 229                                             | 198               | (86.5)  | 0             | (0.0) | 7    | (3.1) | 2                        | (0.9) | 18                | (7.9)  | 4                    | (1.7)  |
| Rhode Island                           | 25                                              | 24                | (96.0)  | 0             | (0.0) | 0    | (0.0) | 0                        | (0.0) | 1                 | (4.0)  | 0                    | (0.0)  |
| South Carolina                         | 147                                             | 132               | (89.8)  | 0             | (0.0) | 2    | (1.4) | 1                        | (0.7) | 12                | (8.2)  | 0                    | (0.0)  |
| South Dakota                           | 14                                              | 11                | (78.6)  | 0             | (0.0) | 0    | (0.0) | 1                        | (7.1) | 1                 | (7.1)  | 1                    | (7.1)  |
| Tennessee                              | 184                                             | 163               | (88.6)  | 2             | (1.1) | 2    | (1.1) | 0                        | (0.0) | 14                | (7.6)  | 3                    | (1.6)  |
| Texas                                  | 1,333                                           | 1,092             | (81.9)  | 3             | (0.2) | 28   | (2.1) | 15                       | (1.1) | 94                | (7.1)  | 101                  | (7.6)  |
| Utah                                   | 20                                              | 18                | (90.0)  | 0             | (0.0) | 0    | (0.0) | 0                        | (0.0) | 2                 | (10.0) | 0                    | (0.0)  |
| Vermont                                | 5                                               | 5                 | (100.0) | 0             | (0.0) | 0    | (0.0) | 0                        | (0.0) | 0                 | (0.0)  | 0                    | (0.0)  |
| Virginia                               | 259                                             | 240               | (92.7)  | 0             | (0.0) | 6    | (2.3) | 0                        | (0.0) | 10                | (3.9)  | 3                    | (1.2)  |
| Washington                             | 234                                             | 207               | (88.5)  | 3             | (1.3) | 1    | (0.4) | 0                        | (0.0) | 15                | (6.4)  | 8                    | (3.4)  |
| West Virginia                          | 14                                              | 12                | (85.7)  | 0             | (0.0) | 0    | (0.0) | 0                        | (0.0) | 2                 | (14.3) | 0                    | (0.0)  |
| Wisconsin                              | 54                                              | 46                | (85.2)  | 0             | (0.0) | 1    | (1.9) | 0                        | (0.0) | 5                 | (9.3)  | 2                    | (3.7)  |
| Wyoming                                | 7                                               | 3                 | (42.9)  | 0             | (0.0) | 0    | (0.0) | 0                        | (0.0) | 0                 | (0.0)  | 4                    | (57.1) |
| American Samoa <sup>6</sup>            | 3                                               | 3                 | (100.0) | 0             | (0.0) | 0    | (0.0) | 0                        | (0.0) | 0                 | (0.0)  | 0                    | (0.0)  |
| Fed. States of Micronesia <sup>6</sup> | 172                                             | 153               | (89.0)  | 0             | (0.0) | 5    | (2.9) | 8                        | (4.7) | 6                 | (3.5)  |                      |        |
| Guam <sup>6</sup>                      | 98                                              | 91                | (92.9)  | 0             | (0.0) | 0    | (0.0) | 0                        | (0.0) | 6                 | (6.1)  | 1                    | (1.0)  |
| Marshall Islands <sup>6</sup>          | 207                                             | 71                | (34.3)  | 0             | (0.0) | 1    | (0.5) | 1                        | (0.5) | 13                | (6.3)  | 121                  | (58.5) |
| N. Mariana Islands <sup>6</sup>        | 30                                              | 24                | (80.0)  | 0             | (0.0) | 1    | (3.3) | 0                        | (0.0) | 3                 | (10.0) | 2                    | (6.7)  |
| Puerto Rico <sup>6</sup>               | 78                                              | 65                | (83.3)  | 0             | (0.0) | 3    | (3.8) | 2                        | (2.6) | 8                 | (10.3) | 0                    | (0.0)  |
| Republic of Palau <sup>6</sup>         | 17                                              | 8                 | (47.1)  | 0             | (0.0) | 0    | (0.0) | 0                        | (0.0) | 2                 | (11.8) | 7                    | (41.2) |
| U.S. Virgin Islands <sup>6</sup>       | ...                                             | ...               | ...     | ...           | ...   | ...  | ...   | ...                      | ...   | ...               | ...    | ...                  | ...    |

<sup>1</sup>Most recent year for which data are available.

<sup>2</sup>Number of cases in persons alive at diagnosis, with an initial regimen of one or more drugs prescribed. Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia).

<sup>3</sup>Died = Died of any cause.

<sup>4</sup>Includes cases reported as Other, Missing, or Unknown.

<sup>5</sup>Excludes New York City.

<sup>6</sup>Not included in U.S. totals.

Note: Ellipses indicate data not available.

**Table 58. Reason Therapy Was Extended Beyond 12 Months: Reporting Areas, 2010<sup>1</sup>**

| Reporting Area       | Total Cases with Therapy Extended <sup>2,3</sup> |     | Adverse Event |     | Non-adherence |     | Failure |     | Clinically Indicated |     | Other<br>No.<br>(%) |     |         |
|----------------------|--------------------------------------------------|-----|---------------|-----|---------------|-----|---------|-----|----------------------|-----|---------------------|-----|---------|
|                      | No.                                              | (%) | No.           | (%) | No.           | (%) | No.     | (%) | No.                  | (%) |                     |     |         |
| United States        | 766                                              | 72  | (9.4)         | 156 | (20.4)        | 104 | (13.6)  | 7   | (0.9)                | 330 | (43.1)              | 211 | (27.5)  |
| Alabama              | 4                                                | 0   | (0.0)         | 0   | (0.0)         | 0   | (0.0)   | 0   | (0.0)                | 4   | (100.0)             | 0   | (0.0)   |
| Alaska               | 4                                                | 3   | (75.0)        | 2   | (50.0)        | 2   | (50.0)  | 1   | (25.0)               | 0   | (0.0)               | 0   | (0.0)   |
| Arizona              | 7                                                | 0   | (0.0)         | 1   | (14.3)        | 0   | (0.0)   | 0   | (0.0)                | 5   | (71.4)              | 2   | (28.6)  |
| Arkansas             | 4                                                | 0   | (0.0)         | 1   | (25.0)        | 2   | (50.0)  | 0   | (0.0)                | 1   | (25.0)              | 0   | (0.0)   |
| California           | 228                                              | 16  | (7.0)         | 59  | (25.9)        | 20  | (8.8)   | 0   | (0.0)                | 105 | (46.1)              | 73  | (32.0)  |
| Colorado             | 4                                                | 0   | (0.0)         | 1   | (25.0)        | 1   | (25.0)  | 0   | (0.0)                | 1   | (25.0)              | 1   | (25.0)  |
| Connecticut          | 10                                               | 1   | (10.0)        | 3   | (30.0)        | 1   | (10.0)  | 0   | (0.0)                | 4   | (40.0)              | 6   | (60.0)  |
| Delaware             | 1                                                | 0   | (0.0)         | 0   | (0.0)         | 0   | (0.0)   | 0   | (0.0)                | 0   | (0.0)               | 1   | (100.0) |
| District of Columbia | 1                                                | 0   | (0.0)         | 1   | (100.0)       | 0   | (0.0)   | 0   | (0.0)                | 0   | (0.0)               | 0   | (0.0)   |
| Florida              | 41                                               | 6   | (14.6)        | 9   | (22.0)        | 3   | (7.3)   | 1   | (2.4)                | 22  | (53.7)              | 6   | (14.6)  |
| Georgia              | 37                                               | 4   | (10.8)        | 1   | (2.7)         | 12  | (32.4)  | 0   | (0.0)                | 22  | (59.5)              | 7   | (18.9)  |
| Hawaii               | 3                                                | 0   | (0.0)         | 1   | (33.3)        | 0   | (0.0)   | 0   | (0.0)                | 0   | (0.0)               | 3   | (100.0) |
| Idaho                | 1                                                | 0   | (0.0)         | 0   | (0.0)         | 0   | (0.0)   | 0   | (0.0)                | 1   | (100.0)             | 0   | (0.0)   |
| Illinois             | 23                                               | 1   | (4.3)         | 8   | (34.8)        | 2   | (8.7)   | 1   | (4.3)                | 11  | (47.8)              | 1   | (4.3)   |
| Indiana              | 4                                                | 0   | (0.0)         | 1   | (25.0)        | 1   | (25.0)  | 0   | (0.0)                | 1   | (25.0)              | 2   | (50.0)  |
| Iowa                 | 0                                                | 0   | ...           | 0   | ...           | 0   | ...     | 0   | ...                  | 0   | ...                 | 0   | ...     |
| Kansas               | 0                                                | 0   | ...           | 0   | ...           | 0   | ...     | 0   | ...                  | 0   | ...                 | 0   | ...     |
| Kentucky             | 1                                                | 0   | (0.0)         | 1   | (100.0)       | 1   | (100.0) | 0   | (0.0)                | 0   | (0.0)               | 0   | (0.0)   |
| Louisiana            | 13                                               | 0   | (0.0)         | 3   | (23.1)        | 2   | (15.4)  | 0   | (0.0)                | 2   | (15.4)              | 6   | (46.2)  |
| Maine                | 0                                                | 0   | ...           | 0   | ...           | 0   | ...     | 0   | ...                  | 0   | ...                 | 0   | ...     |
| Maryland             | 13                                               | 0   | (0.0)         | 1   | (7.7)         | 3   | (23.1)  | 0   | (0.0)                | 6   | (46.2)              | 4   | (30.8)  |
| Massachusetts        | 15                                               | 1   | (6.7)         | 7   | (46.7)        | 0   | (0.0)   | 1   | (6.7)                | 6   | (40.0)              | 1   | (6.7)   |
| Michigan             | 11                                               | 0   | (0.0)         | 0   | (0.0)         | 4   | (36.4)  | 0   | (0.0)                | 3   | (27.3)              | 4   | (36.4)  |
| Minnesota            | 15                                               | 0   | (0.0)         | 4   | (26.7)        | 3   | (20.0)  | 0   | (0.0)                | 8   | (53.3)              | 1   | (6.7)   |
| Mississippi          | 4                                                | 1   | (25.0)        | 2   | (50.0)        | 0   | (0.0)   | 0   | (0.0)                | 1   | (25.0)              | 0   | (0.0)   |
| Missouri             | 0                                                | 0   | ...           | 0   | ...           | 0   | ...     | 0   | ...                  | 0   | ...                 | 0   | ...     |
| Montana              | 0                                                | 0   | ...           | 0   | ...           | 0   | ...     | 0   | ...                  | 0   | ...                 | 0   | ...     |
| Nebraska             | 2                                                | 0   | (0.0)         | 1   | (50.0)        | 0   | (0.0)   | 0   | (0.0)                | 1   | (50.0)              | 0   | (0.0)   |
| Nevada               | 9                                                | 2   | (22.2)        | 4   | (44.4)        | 1   | (11.1)  | 0   | (0.0)                | 3   | (33.3)              | 1   | (11.1)  |
| New Hampshire        | 1                                                | 0   | (0.0)         | 1   | (100.0)       | 0   | (0.0)   | 0   | (0.0)                | 0   | (0.0)               | 0   | (0.0)   |
| New Jersey           | 23                                               | 8   | (34.8)        | 6   | (26.1)        | 1   | (4.3)   | 0   | (0.0)                | 6   | (26.1)              | 10  | (43.5)  |
| New Mexico           | 3                                                | 1   | (33.3)        | 1   | (33.3)        | 1   | (33.3)  | 0   | (0.0)                | 0   | (0.0)               | 0   | (0.0)   |

**Table 58. (Con't) Reason Therapy Was Extended Beyond 12 Months: Reporting Areas, 2010<sup>1</sup>**

| Reporting Area                         | Total Cases Extended <sup>2,3</sup> with Therapy | Reasons Therapy Was Extended |         |                   |        |                   |         | Other (%)   |        |                          |        |           |
|----------------------------------------|--------------------------------------------------|------------------------------|---------|-------------------|--------|-------------------|---------|-------------|--------|--------------------------|--------|-----------|
|                                        |                                                  | Rifampin Resistant No.       | (%)     | Adverse Event No. | (%)    | Non-adherence No. | (%)     | Failure No. | (%)    | Clinically Indicated No. | (%)    | Other     |
| New York State <sup>4</sup>            | 21                                               | 6                            | (28.6)  | 3                 | (14.3) | 1                 | (4.8)   | 0           | (0.0)  | 7                        | (33.3) | 5 (23.8)  |
| New York City                          | 17                                               | 3                            | (17.6)  | 3                 | (17.6) | 4                 | (23.5)  | 0           | (0.0)  | 4                        | (23.5) | 5 (29.4)  |
| North Carolina                         | 18                                               | 0                            | (0.0)   | 5                 | (27.8) | 2                 | (11.1)  | 0           | (0.0)  | 10                       | (55.6) | 5 (27.8)  |
| North Dakota                           | 2                                                | 0                            | (0.0)   | 1                 | (50.0) | 1                 | (50.0)  | 0           | (0.0)  | 0                        | (0.0)  | 0 (0.0)   |
| Ohio                                   | 7                                                | 1                            | (14.3)  | 1                 | (14.3) | 0                 | (0.0)   | 0           | (0.0)  | 6                        | (85.7) | 0 (0.0)   |
| Oklahoma                               | 4                                                | 0                            | (0.0)   | 2                 | (50.0) | 0                 | (0.0)   | 0           | (0.0)  | 0                        | (0.0)  | 2 (50.0)  |
| Oregon                                 | 1                                                | 1                            | (100.0) | 0                 | (0.0)  | 0                 | (0.0)   | 0           | (0.0)  | 0                        | (0.0)  | 0 (0.0)   |
| Pennsylvania                           | 32                                               | 4                            | (12.5)  | 13                | (40.6) | 2                 | (6.3)   | 0           | (0.0)  | 13                       | (40.6) | 11 (34.4) |
| Rhode Island                           | 9                                                | 0                            | (0.0)   | 0                 | (0.0)  | 4                 | (44.4)  | 0           | (0.0)  | 6                        | (66.7) | 1 (11.1)  |
| South Carolina                         | 7                                                | 0                            | (0.0)   | 2                 | (28.6) | 1                 | (14.3)  | 0           | (0.0)  | 4                        | (57.1) | 0 (0.0)   |
| South Dakota                           | 0                                                | 0                            | ...     | 0                 | ...    | 0                 | ...     | 0           | ...    | 0                        | ...    | 0 (0.0)   |
| Tennessee                              | 12                                               | 0                            | (0.0)   | 0                 | (0.0)  | 1                 | (8.3)   | 0           | (0.0)  | 6                        | (50.0) | 6 (50.0)  |
| Texas                                  | 110                                              | 7                            | (6.4)   | 4                 | (3.6)  | 25                | (22.7)  | 2           | (1.8)  | 47                       | (42.7) | 27 (24.5) |
| Utah                                   | 2                                                | 1                            | (50.0)  | 1                 | (50.0) | 0                 | (0.0)   | 0           | (0.0)  | 0                        | (0.0)  | 0 (0.0)   |
| Vermont                                | 0                                                | 0                            | ...     | 0                 | ...    | 0                 | ...     | 0           | ...    | 0                        | ...    | 0 (0.0)   |
| Virginia                               | 18                                               | 1                            | (5.6)   | 2                 | (11.1) | 0                 | (0.0)   | 0           | (0.0)  | 5                        | (27.8) | 10 (55.6) |
| Washington                             | 15                                               | 2                            | (13.3)  | 0                 | (0.0)  | 2                 | (13.3)  | 0           | (0.0)  | 4                        | (26.7) | 7 (46.7)  |
| West Virginia                          | 0                                                | 0                            | ...     | 0                 | ...    | 0                 | ...     | 0           | ...    | 0                        | ...    | 0 (0.0)   |
| Wisconsin                              | 8                                                | 2                            | (25.0)  | 0                 | (0.0)  | 1                 | (12.5)  | 1           | (12.5) | 5                        | (62.5) | 2 (25.0)  |
| Wyoming                                | 1                                                | 0                            | (0.0)   | 0                 | (0.0)  | 0                 | (0.0)   | 0           | (0.0)  | 0                        | (0.0)  | 1 (100.0) |
| American Samoa <sup>5</sup>            | 0                                                | 0                            | ...     | 0                 | ...    | 0                 | ...     | 0           | ...    | 0                        | ...    | 0 (0.0)   |
| Fed. States of Micronesia <sup>5</sup> | 3                                                | 1                            | (33.3)  | 1                 | (33.3) | 0                 | (0.0)   | 0           | (0.0)  | 0                        | (0.0)  | 1 (33.3)  |
| Guam <sup>5</sup>                      | 2                                                | 0                            | (0.0)   | 0                 | (0.0)  | 1                 | (50.0)  | 0           | (0.0)  | 1                        | (50.0) | 0 (0.0)   |
| Marshall Islands <sup>5</sup>          | 1                                                | 0                            | (0.0)   | 0                 | (0.0)  | 1                 | (100.0) | 0           | (0.0)  | 0                        | (0.0)  | 0 (0.0)   |
| N. Mariana Islands <sup>5</sup>        | 0                                                | 0                            | ...     | 0                 | ...    | 0                 | ...     | 0           | ...    | 0                        | ...    | 0 (0.0)   |
| Puerto Rico <sup>5</sup>               | 0                                                | 0                            | ...     | 0                 | ...    | 0                 | ...     | 0           | ...    | 0                        | ...    | 0 (0.0)   |
| Republic of Palau <sup>5</sup>         | 0                                                | 0                            | ...     | 0                 | ...    | 0                 | ...     | 0           | ...    | 0                        | ...    | 0 (0.0)   |
| U.S. Virgin Islands <sup>5</sup>       | 0                                                | 0                            | ...     | 0                 | ...    | 0                 | ...     | 0           | ...    | 0                        | ...    | 0 (0.0)   |

<sup>1</sup> Most recent year for which data are available.

<sup>2</sup> Among patients who were alive at diagnosis, started on treatment and had a duration of treatment greater than 365 days.

<sup>3</sup> Patient may have more than 1 reason therapy was extended beyond 12 months (total reasons therapy extended may be greater than total patients with therapy extended).

<sup>4</sup> Excludes New York City.

<sup>5</sup> Not included in U.S. totals.

Note: Ellipses indicate data not available.

**Table 59. Completion of Tuberculosis Therapy (COT) Cases and Percentages<sup>1</sup> by Hispanic Ethnicity and Non-Hispanic Race:  
Reporting Areas, 2010<sup>2</sup>**

| Reporting Area       | Total Cases <sup>3</sup> | Hispanic <sup>4</sup> |               | American Indian or Alaska Native |               | Asian       |               | Black       |               | Native Hawaiian or Other Pacific Islander |               | White       |               | Multiple Race |               | Non-Hispanic |               |
|----------------------|--------------------------|-----------------------|---------------|----------------------------------|---------------|-------------|---------------|-------------|---------------|-------------------------------------------|---------------|-------------|---------------|---------------|---------------|--------------|---------------|
|                      |                          | No.                   | (%)           | No.                              | (%)           | No.         | (%)           | No.         | (%)           | No.                                       | (%)           | No.         | (%)           | No.           | (%)           | No.          | (%)           |
| <b>United States</b> | <b>9,480</b>             | <b>2686</b>           | <b>(87.5)</b> | <b>123</b>                       | <b>(90.2)</b> | <b>2666</b> | <b>(87.7)</b> | <b>2312</b> | <b>(88.8)</b> | <b>84</b>                                 | <b>(92.9)</b> | <b>1461</b> | <b>(88.1)</b> | <b>130</b>    | <b>(92.3)</b> | <b>18</b>    | <b>(94.4)</b> |
| Alabama              | 124                      | 21                    | (95.2)        | 1                                | (100.0)       | 10          | (80.0)        | 50          | (86.0)        | 0                                         | ...           | 42          | (95.2)        | 0             | ...           | 0            | ...           |
| Alaska               | 50                       | 0                     | ...           | 36                               | (91.7)        | 7           | (100.0)       | 2           | (100.0)       | 0                                         | ...           | 5           | (100.0)       | 0             | ...           | 0            | ...           |
| Arizona              | 220                      | 93                    | (82.8)        | 21                               | (95.2)        | 53          | (86.8)        | 18          | (100.0)       | 0                                         | ...           | 35          | (80.0)        | 0             | ...           | 0            | ...           |
| Arkansas             | 70                       | 8                     | (100.0)       | 0                                | ...           | 8           | (87.5)        | 22          | (77.3)        | 3                                         | (100.0)       | 29          | (89.7)        | 0             | ...           | 0            | ...           |
| California           | 1,967                    | 737                   | (83.7)        | 0                                | ...           | 828         | (86.7)        | 133         | (88.7)        | 12                                        | (83.3)        | 156         | (87.8)        | 96            | (90.6)        | 5            | (80.0)        |
| Colorado             | 59                       | 19                    | (89.5)        | 1                                | (100.0)       | 15          | (86.7)        | 15          | (100.0)       | 2                                         | (100.0)       | 7           | (100.0)       | 0             | ...           | 0            | ...           |
| Connecticut          | 70                       | 19                    | (89.5)        | 0                                | ...           | 27          | (81.5)        | 10          | (90.0)        | 0                                         | ...           | 12          | (83.3)        | 2             | (100.0)       | 0            | ...           |
| Delaware             | 16                       | 2                     | (100.0)       | 0                                | ...           | 6           | (83.3)        | 8           | (100.0)       | 0                                         | ...           | 0           | ...           | 0             | ...           | 0            | ...           |
| District of Columbia | 34                       | 7                     | (71.4)        | 0                                | ...           | 2           | (100.0)       | 24          | (83.3)        | 0                                         | ...           | 1           | (100.0)       | 0             | ...           | 0            | ...           |
| Florida              | 718                      | 221                   | (94.1)        | 2                                | (100.0)       | 78          | (93.6)        | 246         | (95.5)        | 3                                         | (100.0)       | 167         | (91.6)        | 1             | (100.0)       | 0            | ...           |
| Georgia              | 341                      | 53                    | (86.8)        | 0                                | ...           | 71          | (93.0)        | 174         | (83.9)        | 0                                         | ...           | 42          | (92.9)        | 1             | (100.0)       | 0            | ...           |
| Hawaii               | 105                      | 1                     | (100.0)       | 0                                | ...           | 80          | (95.0)        | 0           | ...           | 18                                        | (94.4)        | 6           | (100.0)       | 0             | ...           | 0            | ...           |
| Idaho                | 14                       | 4                     | (50.0)        | 0                                | ...           | 1           | (100.0)       | 4           | (100.0)       | 0                                         | ...           | 4           | (100.0)       | 1             | (100.0)       | 0            | ...           |
| Illinois             | 317                      | 98                    | (87.8)        | 0                                | ...           | 86          | (83.7)        | 73          | (87.7)        | 0                                         | ...           | 60          | (86.7)        | 0             | ...           | 0            | ...           |
| Indiana              | 81                       | 22                    | (100.0)       | 0                                | ...           | 17          | (94.1)        | 16          | (93.8)        | 0                                         | ...           | 26          | (84.6)        | 0             | ...           | 0            | ...           |
| Iowa                 | 41                       | 10                    | (100.0)       | 0                                | ...           | 14          | (92.9)        | 11          | (81.8)        | 0                                         | ...           | 6           | (100.0)       | 0             | ...           | 0            | ...           |
| Kansas               | 40                       | 11                    | (100.0)       | 1                                | (100.0)       | 12          | (100.0)       | 12          | (100.0)       | 0                                         | ...           | 4           | (100.0)       | 0             | ...           | 0            | ...           |
| Kentucky             | 78                       | 10                    | (90.0)        | 0                                | ...           | 11          | (72.7)        | 19          | (84.2)        | 0                                         | ...           | 38          | (84.2)        | 0             | ...           | 0            | ...           |
| Louisiana            | 179                      | 21                    | (71.4)        | 0                                | ...           | 21          | (71.4)        | 99          | (83.8)        | 0                                         | ...           | 37          | (81.1)        | 1             | (100.0)       | 0            | ...           |
| Maine                | 6                        | 1                     | (100.0)       | 0                                | ...           | 0           | ...           | 4           | (100.0)       | 0                                         | ...           | 1           | (100.0)       | 0             | ...           | 0            | ...           |
| Maryland             | 187                      | 37                    | (81.1)        | 1                                | (0.0)         | 54          | (90.7)        | 81          | (96.3)        | 0                                         | ...           | 14          | (85.7)        | 0             | ...           | 0            | ...           |
| Massachusetts        | 195                      | 28                    | (85.7)        | 0                                | ...           | 78          | (78.2)        | 51          | (88.2)        | 0                                         | ...           | 37          | (83.8)        | 1             | (100.0)       | 0            | ...           |
| Michigan             | 148                      | 16                    | (93.8)        | 0                                | ...           | 46          | (93.5)        | 57          | (84.2)        | 1                                         | (100.0)       | 27          | (92.6)        | 0             | ...           | 1            | (100.0)       |
| Minnesota            | 123                      | 10                    | (100.0)       | 3                                | (66.7)        | 35          | (82.9)        | 65          | (90.8)        | 0                                         | ...           | 9           | (77.8)        | 1             | (100.0)       | 0            | ...           |
| Mississippi          | 106                      | 8                     | (87.5)        | 1                                | (100.0)       | 5           | (60.0)        | 65          | (92.3)        | 0                                         | ...           | 27          | (96.3)        | 0             | ...           | 0            | ...           |
| Missouri             | 96                       | 11                    | (72.7)        | 1                                | (100.0)       | 24          | (87.5)        | 27          | (85.2)        | 3                                         | (100.0)       | 28          | (71.4)        | 0             | ...           | 2            | (100.0)       |
| Montana              | 6                        | 0                     | ...           | 5                                | (100.0)       | 0           | ...           | 0           | ...           | 0                                         | ...           | 1           | (100.0)       | 0             | ...           | 0            | ...           |
| Nebraska             | 25                       | 11                    | (90.9)        | 0                                | ...           | 4           | (100.0)       | 6           | (100.0)       | 0                                         | ...           | 3           | (100.0)       | 1             | (0.0)         | 0            | ...           |
| Nevada               | 108                      | 28                    | (78.6)        | 1                                | (100.0)       | 39          | (89.7)        | 21          | (85.7)        | 2                                         | (100.0)       | 16          | (87.5)        | 1             | (100.0)       | 0            | ...           |
| New Hampshire        | 8                        | 2                     | (100.0)       | 0                                | ...           | 2           | (100.0)       | 3           | (100.0)       | 0                                         | ...           | 1           | (0.0)         | 0             | ...           | 0            | ...           |
| New Jersey           | 344                      | 103                   | (91.3)        | 0                                | ...           | 134         | (88.8)        | 73          | (91.8)        | 0                                         | ...           | 34          | (94.1)        | 0             | ...           | 0            | ...           |

**Table 59. (Cont'd) Completion of Tuberculosis Therapy (COT) Cases and Percentages<sup>1</sup> by Hispanic Ethnicity and Non-Hispanic Race: Reporting Areas, 2010<sup>2</sup>**

| Reporting Area                         | Total Cases <sup>3</sup> | Hispanic <sup>4</sup> |         | American Indian or Alaska Native |         | Asian |         | Black |         | Native Hawaiian or Other Pacific Islander |         | Non-Hispanic |         | Unknown or Missing |         |
|----------------------------------------|--------------------------|-----------------------|---------|----------------------------------|---------|-------|---------|-------|---------|-------------------------------------------|---------|--------------|---------|--------------------|---------|
|                                        |                          | No.                   | (%)     | No.                              | (%)     | No.   | (%)     | No.   | (%)     | No.                                       | (%)     | No.          | (%)     | No.                | (%)     |
| New Mexico                             | 31                       | 16                    | (87.5)  | 8                                | (87.5)  | 2     | (100.0) | 2     | (100.0) | 0                                         | ...     | 3            | (100.0) | 0                  | ...     |
| New York State <sup>5</sup>            | 215                      | 72                    | (86.1)  | 0                                | ...     | 65    | (95.4)  | 40    | (90.0)  | 0                                         | ...     | 37           | (89.2)  | 1                  | (100.0) |
| New York City                          | 616                      | 173                   | (90.8)  | 0                                | ...     | 244   | (93.4)  | 140   | (93.6)  | 1                                         | (100.0) | 44           | (90.9)  | 7                  | (100.0) |
| North Carolina                         | 264                      | 50                    | (94.0)  | 5                                | (100.0) | 50    | (94.0)  | 98    | (94.9)  | 4                                         | (100.0) | 51           | (94.1)  | 6                  | (100.0) |
| North Dakota                           | 8                        | 0                     | ...     | 2                                | (0.0)   | 2     | (100.0) | 4     | (100.0) | 0                                         | ...     | 0            | ...     | 0                  | ...     |
| Ohio                                   | 157                      | 19                    | (84.2)  | 0                                | ...     | 22    | (77.3)  | 71    | (95.8)  | 0                                         | ...     | 44           | (84.1)  | 0                  | ...     |
| Oklahoma                               | 77                       | 13                    | (92.3)  | 10                               | (100.0) | 13    | (92.3)  | 11    | (90.9)  | 6                                         | (83.3)  | 22           | (95.5)  | 2                  | (100.0) |
| Oregon                                 | 74                       | 18                    | (100.0) | 1                                | (100.0) | 21    | (100.0) | 13    | (92.3)  | 3                                         | (100.0) | 18           | (100.0) | 0                  | ...     |
| Pennsylvania                           | 191                      | 19                    | (94.7)  | 0                                | ...     | 66    | (86.4)  | 64    | (78.1)  | 0                                         | ...     | 40           | (92.5)  | 2                  | (100.0) |
| Rhode Island                           | 23                       | 8                     | (62.5)  | 0                                | ...     | 7     | (57.1)  | 4     | (75.0)  | 0                                         | ...     | 4            | (75.0)  | 0                  | ...     |
| South Carolina                         | 132                      | 22                    | (81.8)  | 0                                | ...     | 8     | (75.0)  | 71    | (91.5)  | 8                                         | (100.0) | 23           | (100.0) | 0                  | ...     |
| South Dakota                           | 12                       | 0                     | ...     | 10                               | (90.0)  | 0     | ...     | 1     | (100.0) | 0                                         | ...     | 1            | (100.0) | 0                  | ...     |
| Tennessee                              | 156                      | 35                    | (91.4)  | 0                                | ...     | 21    | (90.5)  | 48    | (93.8)  | 0                                         | ...     | 51           | (88.2)  | 1                  | (100.0) |
| Texas                                  | 1,117                    | 544                   | (87.7)  | 4                                | (75.0)  | 176   | (83.0)  | 220   | (75.9)  | 3                                         | (100.0) | 169          | (81.1)  | 1                  | (100.0) |
| Utah                                   | 16                       | 7                     | (100.0) | 0                                | ...     | 2     | (100.0) | 5     | (100.0) | 0                                         | ...     | 2            | (50.0)  | 0                  | ...     |
| Vermont                                | 5                        | 0                     | ...     | 0                                | ...     | 0     | ...     | 2     | (100.0) | 0                                         | ...     | 3            | (100.0) | 0                  | ...     |
| Virginia                               | 242                      | 42                    | (92.9)  | 0                                | ...     | 93    | (81.7)  | 77    | (90.9)  | 0                                         | ...     | 29           | (89.7)  | 1                  | (100.0) |
| Washington                             | 205                      | 26                    | (92.3)  | 8                                | (100.0) | 92    | (84.8)  | 34    | (85.3)  | 15                                        | (86.7)  | 25           | (76.0)  | 3                  | (100.0) |
| West Virginia                          | 12                       | 0                     | ...     | 0                                | ...     | 0     | ...     | 4     | (100.0) | 0                                         | ...     | 8            | (100.0) | 0                  | ...     |
| Wisconsin                              | 45                       | 9                     | (77.8)  | 1                                | (0.0)   | 13    | (92.3)  | 13    | (84.6)  | 0                                         | ...     | 9            | (100.0) | 0                  | ...     |
| Wyoming                                | 6                        | --                    | --      | --                               | --      | --    | --      | --    | --      | --                                        | --      | --           | --      | --                 | --      |
| American Samoa <sup>6</sup>            | 3                        | 0                     | ...     | 0                                | ...     | 1     | (0.0)   | 0     | ...     | 2                                         | (50.0)  | 0            | ...     | 0                  | ...     |
| Fed. States of Micronesia <sup>6</sup> | 162                      | 1                     | (100.0) | 0                                | ...     | 0     | ...     | 0     | ...     | 155                                       | (91.6)  | 0            | ...     | 2                  | (100.0) |
| Guam <sup>6</sup>                      | 87                       | 1                     | (100.0) | 0                                | ...     | 24    | (100.0) | 0     | ...     | 58                                        | (91.4)  | 2            | (100.0) | 0                  | ...     |
| Marshall Islands <sup>6</sup>          | 191                      | --                    | --      | --                               | --      | --    | --      | --    | --      | --                                        | --      | --           | --      | --                 | --      |
| N. Mariana Islands <sup>6</sup>        | 25                       | 0                     | ...     | 0                                | ...     | 8     | (87.5)  | 0     | ...     | 12                                        | (100.0) | 0            | ...     | 0                  | ...     |
| Puerto Rico <sup>6</sup>               | 70                       | 67                    | (92.5)  | 0                                | ...     | 0     | ...     | 0     | ...     | 2                                         | (50.0)  | 0            | ...     | 1                  | (100.0) |
| Republic of Palau <sup>6</sup>         | 15                       | --                    | --      | --                               | --      | --    | --      | --    | --      | --                                        | --      | --           | --      | --                 | --      |
| U.S. Virgin Islands <sup>6</sup>       | --                       | --                    | --      | --                               | --      | --    | --      | --    | --      | --                                        | --      | --           | --      | --                 | --      |

<sup>1</sup>Percentages shown only for reporting areas with information reported for ≥90% of cases, and indicate the percentage of those who completed therapy within 1 year.

<sup>2</sup>Most recent year for which data are available.

<sup>3</sup>Therapy < 1 year indicated in persons alive at diagnosis with an initial regimen of one or more drugs prescribed, who did not die during therapy. Excludes persons with initial isolate rifampin resistant, or patient with meningeal disease, or pediatric patient (aged <15) with military disease or positive blood culture, and those who moved out of country during treatment.

<sup>4</sup>Persons of Hispanic or Latino origin may be of any race.

<sup>5</sup>Excludes New York City.

<sup>6</sup>Not included in U.S. totals.

**Note:** Case counts and percentage for race categories do not include persons of Hispanic ethnicity. Ellipses indicate data not available. See Technical Notes for description of Completion of Therapy calculation (page 9).

**Table 60. Tuberculosis Cases and Percentages by Completion of Tuberculosis Therapy (COT): Reporting Areas, 2010<sup>1</sup>**

| Reporting Area                         | Total Cases   | Therapy ≤1 Year Indicated <sup>2,3,4</sup> |                |               | Therapy >1 Year Indicated <sup>3,5</sup> |               |              | All Drug Therapy <sup>3</sup> |  |
|----------------------------------------|---------------|--------------------------------------------|----------------|---------------|------------------------------------------|---------------|--------------|-------------------------------|--|
|                                        |               | No.                                        | COT ≤1 Year(%) | COT(%)        | No.                                      | COT(%)        | No.          | COT(%)                        |  |
| <b>United States</b>                   | <b>11,163</b> | <b>9480</b>                                | <b>(88.1)</b>  | <b>(95.6)</b> | <b>702</b>                               | <b>(59.8)</b> | <b>10183</b> | <b>(93.2)</b>                 |  |
| Alabama                                | 146           | 124                                        | (90.3)         | (96.8)        | 3                                        | (66.7)        | 127          | (96.1)                        |  |
| Alaska                                 | 57            | 50                                         | (94.0)         | (98.0)        | 2                                        | (100.0)       | 52           | (98.1)                        |  |
| Arizona                                | 282           | 220                                        | (85.9)         | (90.5)        | 41                                       | (41.5)        | 261          | (82.8)                        |  |
| Arkansas                               | 78            | 70                                         | (87.1)         | (94.3)        | 6                                        | (50.0)        | 76           | (90.8)                        |  |
| California                             | 2,326         | 1967                                       | (86.0)         | (94.7)        | 146                                      | (50.7)        | 2114         | (91.6)                        |  |
| Colorado                               | 71            | 59                                         | (93.2)         | (100.0)       | 7                                        | (100.0)       | 66           | (100.0)                       |  |
| Connecticut                            | 85            | 70                                         | (85.7)         | (97.1)        | 8                                        | (62.5)        | 78           | (93.6)                        |  |
| Delaware                               | 20            | 16                                         | (93.8)         | (100.0)       | 3                                        | (33.3)        | 19           | (89.5)                        |  |
| District of Columbia                   | 43            | 34                                         | (82.4)         | (85.3)        | 4                                        | (25.0)        | 38           | (78.9)                        |  |
| Florida                                | 833           | 718                                        | (94.0)         | (98.1)        | 35                                       | (65.7)        | 753          | (96.5)                        |  |
| Georgia                                | 411           | 341                                        | (87.4)         | (95.3)        | 34                                       | (58.8)        | 375          | (92.0)                        |  |
| Hawaii                                 | 115           | 105                                        | (95.2)         | (99.0)        | 4                                        | (50.0)        | 109          | (97.2)                        |  |
| Idaho                                  | 15            | 14                                         | (85.7)         | (92.9)        | 0                                        | ...           | 14           | (92.9)                        |  |
| Illinois                               | 372           | 317                                        | (86.4)         | (97.2)        | 22                                       | (54.5)        | 339          | (94.4)                        |  |
| Indiana                                | 90            | 81                                         | (92.6)         | (97.5)        | 3                                        | (66.7)        | 84           | (96.4)                        |  |
| Iowa                                   | 48            | 41                                         | (92.7)         | (95.1)        | 3                                        | (33.3)        | 44           | (90.9)                        |  |
| Kansas                                 | 46            | 40                                         | (100.0)        | (100.0)       | 1                                        | (100.0)       | 41           | (100.0)                       |  |
| Kentucky                               | 90            | 78                                         | (83.3)         | (94.9)        | 2                                        | (50.0)        | 80           | (93.8)                        |  |
| Louisiana                              | 200           | 179                                        | (80.4)         | (92.7)        | 7                                        | (28.6)        | 186          | (90.3)                        |  |
| Maine                                  | 8             | 6                                          | (100.0)        | (100.0)       | 1                                        | (0.0)         | 7            | (85.7)                        |  |
| Maryland                               | 220           | 187                                        | (90.4)         | (97.3)        | 13                                       | (76.9)        | 200          | (96.0)                        |  |
| Massachusetts                          | 222           | 195                                        | (83.1)         | (95.4)        | 17                                       | (41.2)        | 212          | (91.0)                        |  |
| Michigan                               | 183           | 148                                        | (89.9)         | (97.3)        | 10                                       | (60.0)        | 158          | (94.9)                        |  |
| Minnesota                              | 135           | 123                                        | (87.8)         | (98.4)        | 6                                        | (83.3)        | 129          | (97.7)                        |  |
| Mississippi                            | 116           | 106                                        | (91.5)         | (98.1)        | 2                                        | (100.0)       | 108          | (98.1)                        |  |
| Missouri                               | 107           | 96                                         | (81.3)         | (86.5)        | 1                                        | (100.0)       | 97           | (86.6)                        |  |
| Montana                                | 6             | 6                                          | (100.0)        | (100.0)       | 0                                        | ...           | 6            | (100.0)                       |  |
| Nebraska                               | 27            | 25                                         | (92.0)         | (100.0)       | 1                                        | (100.0)       | 26           | (100.0)                       |  |
| Nevada                                 | 114           | 108                                        | (86.1)         | (94.4)        | 3                                        | (66.7)        | 111          | (93.7)                        |  |
| New Hampshire                          | 10            | 8                                          | (87.5)         | (100.0)       | 0                                        | ...           | 8            | (100.0)                       |  |
| New Jersey                             | 405           | 344                                        | (90.7)         | (98.5)        | 31                                       | (58.1)        | 375          | (95.2)                        |  |
| New Mexico                             | 50            | 31                                         | (90.3)         | (100.0)       | 10                                       | (90.0)        | 41           | (97.6)                        |  |
| New York State <sup>6</sup>            | 243           | 215                                        | (90.2)         | (97.7)        | 11                                       | (90.9)        | 226          | (97.3)                        |  |
| New York City                          | 706           | 616                                        | (92.7)         | (96.8)        | 38                                       | (73.7)        | 654          | (95.4)                        |  |
| North Carolina                         | 296           | 264                                        | (94.7)         | (98.9)        | 18                                       | (83.3)        | 282          | (97.9)                        |  |
| North Dakota                           | 9             | 8                                          | (75.0)         | (100.0)       | 0                                        | ...           | 8            | (100.0)                       |  |
| Ohio                                   | 190           | 157                                        | (88.5)         | (98.1)        | 12                                       | (41.7)        | 169          | (94.1)                        |  |
| Oklahoma                               | 86            | 77                                         | (93.5)         | (98.7)        | 2                                        | (50.0)        | 79           | (97.5)                        |  |
| Oregon                                 | 87            | 74                                         | (98.6)         | (100.0)       | 6                                        | (66.7)        | 80           | (97.5)                        |  |
| Pennsylvania                           | 238           | 191                                        | (85.9)         | (96.3)        | 20                                       | (70.0)        | 211          | (93.8)                        |  |
| Rhode Island                           | 26            | 23                                         | (65.2)         | (100.0)       | 1                                        | (100.0)       | 24           | (100.0)                       |  |
| South Carolina                         | 153           | 132                                        | (90.9)         | (98.5)        | 3                                        | (66.7)        | 135          | (97.8)                        |  |
| South Dakota                           | 15            | 12                                         | (91.7)         | (91.7)        | 1                                        | (0.0)         | 13           | (84.6)                        |  |
| Tennessee                              | 193           | 156                                        | (91.0)         | (97.4)        | 14                                       | (78.6)        | 170          | (95.9)                        |  |
| Texas                                  | 1,381         | 1117                                       | (83.6)         | (90.9)        | 122                                      | (63.1)        | 1239         | (88.1)                        |  |
| Utah                                   | 20            | 16                                         | (93.8)         | (100.0)       | 2                                        | (100.0)       | 18           | (100.0)                       |  |
| Vermont                                | 5             | 5                                          | (100.0)        | (100.0)       | 0                                        | ...           | 5            | (100.0)                       |  |
| Virginia                               | 268           | 242                                        | (87.6)         | (98.3)        | 7                                        | (28.6)        | 249          | (96.4)                        |  |
| Washington                             | 239           | 205                                        | (85.9)         | (96.6)        | 14                                       | (64.3)        | 219          | (94.5)                        |  |
| West Virginia                          | 15            | 12                                         | (100.0)        | (100.0)       | 0                                        | ...           | 12           | (100.0)                       |  |
| Wisconsin                              | 55            | 45                                         | (86.7)         | (97.8)        | 4                                        | (50.0)        | 49           | (93.9)                        |  |
| Wyoming                                | 7             | 6                                          | (50.0)         | (50.0)        | 1                                        | (0.0)         | 7            | (42.9)                        |  |
| American Samoa <sup>7</sup>            | 3             | 3                                          | (33.3)         | (100.0)       | 0                                        | ...           | 3            | (100.0)                       |  |
| Fed. States of Micronesia <sup>7</sup> | 172           | 162                                        | (92.0)         | (93.2)        | 2                                        | (100.0)       | 164          | (93.3)                        |  |
| Guam <sup>7</sup>                      | 102           | 87                                         | (94.3)         | (100.0)       | 5                                        | (80.0)        | 92           | (98.9)                        |  |
| Marshall Islands <sup>7</sup>          | 211           | 191                                        | (36.1)         | (37.2)        | 3                                        | (0.0)         | 194          | (36.6)                        |  |
| N. Mariana Islands <sup>7</sup>        | 32            | 25                                         | (96.0)         | (96.0)        | 2                                        | (0.0)         | 27           | (88.9)                        |  |
| Puerto Rico <sup>7</sup>               | 80            | 70                                         | (91.4)         | (92.9)        | 0                                        | ...           | 70           | (92.9)                        |  |
| Republic of Palau <sup>7</sup>         | 17            | 15                                         | (53.3)         | (53.3)        | 0                                        | ...           | 15           | (53.3)                        |  |
| U.S. Virgin Islands <sup>7</sup>       | 0             | 0                                          | --             | --            | 0                                        | ...           | 0            | --                            |  |

<sup>1</sup> Most recent year for which data are available.

<sup>2</sup> Initial isolate susceptible to rifampin (n=6,889) or susceptibility unknown (n=118); culture negative (n=2,048); culture status unknown (n=425).

<sup>3</sup> Number of cases in persons alive at diagnosis, with an initial regimen of one or more drugs prescribed, who did not die during therapy. Percentage for U.S. based on 52 reporting areas (50 states, New York City, and the District of Columbia). Percentages shown only for reporting areas with information reported for ≥90% of cases.

<sup>4</sup> Excludes initial isolate rifampin resistant, or patient with meningeal disease, or pediatric patient (aged <15) with miliary disease or positive blood culture, and those who moved out of country during treatment.

<sup>5</sup> Initial isolate rifampin resistant, or patient with meningeal disease, or pediatric patient (aged <15) with miliary disease or positive blood culture.

<sup>6</sup> Excludes New York City.

<sup>7</sup> Not included in U.S. totals.

Note: Ellipses indicate data not available. See Technical Notes for description of Completion of Therapy calculation (page 9).

**Table 61. Tuberculosis Cases and Percentages in Persons Completing Therapy for Whom Therapy Was Indicated for One Year or Less: Reporting Areas, 2006–2010<sup>1</sup>**

| Reporting Area                         | Year             |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|----------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                                        | 2006             |                  | 2007             |                  | 2008             |                  | 2009             |                  | 2010             |                  |
|                                        | No. <sup>2</sup> | (%) <sup>3</sup> |
| <b>United States</b>                   | <b>12032</b>     | (84.1)           | <b>11763</b>     | (84.8)           | <b>11388</b>     | (85.2)           | <b>9860</b>      | (87.8)           | <b>9480</b>      | (88.1)           |
| Alabama                                | 166              | (86.7)           | 149              | (91.9)           | 150              | (90.0)           | 146              | (93.2)           | 124              | (90.3)           |
| Alaska                                 | 63               | (88.9)           | 43               | (88.4)           | 45               | (88.9)           | 32               | (84.4)           | 50               | (94.0)           |
| Arizona                                | 272              | (79.8)           | 242              | (71.1)           | 195              | (72.8)           | 177              | (83.6)           | 220              | (85.9)           |
| Arkansas                               | 89               | (89.9)           | 96               | (92.7)           | 74               | (79.7)           | 59               | (86.4)           | 70               | (87.1)           |
| California                             | 2398             | (81.3)           | 2424             | (79.6)           | 2386             | (83.9)           | 2142             | (83.3)           | 1967             | (86.0)           |
| Colorado                               | 108              | (88.9)           | 91               | (97.8)           | 94               | (92.6)           | 69               | (94.2)           | 59               | (93.2)           |
| Connecticut                            | 77               | (88.3)           | 96               | (82.3)           | 88               | (90.9)           | 82               | (86.6)           | 70               | (85.7)           |
| Delaware                               | 24               | (83.3)           | 18               | (94.4)           | 22               | (81.8)           | 18               | (77.8)           | 16               | (93.8)           |
| District of Columbia                   | 64               | (70.3)           | 51               | (70.6)           | 49               | (79.6)           | 32               | (81.3)           | 34               | (82.4)           |
| Florida                                | 919              | (89.4)           | 884              | (90.2)           | 826              | (89.6)           | 695              | (93.2)           | 718              | (94.0)           |
| Georgia                                | 445              | (82.5)           | 426              | (85.2)           | 413              | (87.9)           | 345              | (84.1)           | 341              | (87.4)           |
| Hawaii                                 | 101              | (79.2)           | 109              | (77.1)           | 115              | (77.4)           | 96               | (83.3)           | 105              | (95.2)           |
| Idaho                                  | 18               | (77.8)           | 8                | (75.0)           | 11               | (90.9)           | 17               | (94.1)           | 14               | (85.7)           |
| Illinois                               | 500              | (82.0)           | 455              | (84.6)           | 408              | (87.0)           | 364              | (87.6)           | 317              | (86.4)           |
| Indiana                                | 116              | (90.5)           | 118              | (89.0)           | 102              | (91.2)           | 106              | (90.6)           | 81               | (92.6)           |
| Iowa                                   | 37               | (86.5)           | 36               | (88.9)           | 47               | (89.4)           | 39               | (87.2)           | 41               | (92.7)           |
| Kansas                                 | 73               | (93.2)           | 53               | (83.0)           | 54               | (92.6)           | 56               | (100.0)          | 40               | (100.0)          |
| Kentucky                               | 75               | (82.7)           | 108              | (89.8)           | 88               | (80.7)           | 62               | (91.9)           | 78               | (83.3)           |
| Louisiana                              | 178              | (77.0)           | 196              | (79.6)           | 210              | (79.5)           | 171              | (86.0)           | 179              | (80.4)           |
| Maine                                  | 13               | (100.0)          | 18               | (88.9)           | 8                | (87.5)           | 7                | (100.0)          | 6                | (100.0)          |
| Maryland                               | 226              | (90.7)           | 246              | (89.4)           | 248              | (89.1)           | 191              | (88.5)           | 187              | (90.4)           |
| Massachusetts                          | 239              | (85.4)           | 205              | (81.0)           | 235              | (80.9)           | 218              | (82.1)           | 195              | (83.1)           |
| Michigan                               | 200              | (79.5)           | 186              | (81.2)           | 146              | (82.9)           | 115              | (87.8)           | 148              | (89.9)           |
| Minnesota                              | 200              | (90.0)           | 225              | (88.9)           | 199              | (90.5)           | 146              | (91.8)           | 123              | (87.8)           |
| Mississippi                            | 97               | (85.6)           | 118              | (95.8)           | 96               | (92.7)           | 106              | (88.7)           | 106              | (91.5)           |
| Missouri                               | 92               | (78.3)           | 106              | (76.4)           | 100              | (86.0)           | 75               | (81.3)           | 96               | (81.3)           |
| Montana                                | 10               | (90.0)           | 11               | (100.0)          | 5                | (100.0)          | 7                | (100.0)          | 6                | (100.0)          |
| Nebraska                               | 23               | (100.0)          | 24               | (91.7)           | 30               | (80.0)           | 29               | (86.2)           | 25               | (92.0)           |
| Nevada                                 | 82               | (90.2)           | 82               | (85.4)           | 89               | (83.1)           | 94               | (87.2)           | 108              | (86.1)           |
| New Hampshire                          | 15               | (93.3)           | 10               | (90.0)           | 17               | (82.4)           | 15               | (93.3)           | 8                | (87.5)           |
| New Jersey                             | 463              | (84.9)           | 411              | (85.2)           | 379              | (87.6)           | 349              | (92.6)           | 344              | (90.7)           |
| New Mexico                             | 37               | (81.1)           | 43               | (90.7)           | 48               | (91.7)           | 32               | (90.6)           | 31               | (90.3)           |
| New York State <sup>4</sup>            | 271              | (85.6)           | 228              | (87.3)           | 275              | (85.8)           | 207              | (82.6)           | 215              | (90.2)           |
| New York City                          | 823              | (84.4)           | 792              | (90.7)           | 798              | (88.7)           | 661              | (92.6)           | 616              | (92.7)           |
| North Carolina                         | 339              | (87.3)           | 312              | (91.7)           | 304              | (90.8)           | 221              | (93.2)           | 264              | (94.7)           |
| North Dakota                           | 10               | (60.0)           | 4                | (100.0)          | 3                | (33.3)           | 5                | (60.0)           | 8                | (75.0)           |
| Ohio                                   | 205              | (82.9)           | 221              | (87.3)           | 189              | (85.7)           | 147              | (91.2)           | 157              | (88.5)           |
| Oklahoma                               | 129              | (81.4)           | 131              | (81.7)           | 86               | (76.7)           | 89               | (86.5)           | 77               | (93.5)           |
| Oregon                                 | 71               | (91.5)           | 88               | (90.9)           | 70               | (97.1)           | 79               | (97.5)           | 74               | (98.6)           |
| Pennsylvania                           | 290              | (83.4)           | 249              | (84.3)           | 333              | (83.2)           | 202              | (83.7)           | 191              | (85.9)           |
| Rhode Island                           | 24               | (79.2)           | 40               | (90.0)           | 34               | (85.3)           | 23               | (87.0)           | 23               | (65.2)           |
| South Carolina                         | 194              | (86.1)           | 188              | (89.4)           | 160              | (85.0)           | 137              | (92.0)           | 132              | (90.9)           |
| South Dakota                           | 12               | (50.0)           | 11               | (100.0)          | 15               | (93.3)           | 17               | (88.2)           | 12               | (91.7)           |
| Tennessee                              | 239              | (88.3)           | 202              | (86.6)           | 247              | (88.3)           | 176              | (93.8)           | 156              | (91.0)           |
| Texas                                  | 1363             | (83.1)           | 1340             | (81.9)           | 1319             | (79.4)           | 1222             | (88.1)           | 1117             | (83.6)           |
| Utah                                   | 32               | (84.4)           | 35               | (94.3)           | 23               | (95.7)           | 28               | (100.0)          | 16               | (93.8)           |
| Vermont                                | 6                | (83.3)           | 3                | (33.3)           | 5                | (60.0)           | 5                | (80.0)           | 5                | (100.0)          |
| Virginia                               | 292              | (85.3)           | 292              | (88.4)           | 269              | (83.6)           | 244              | (87.3)           | 242              | (87.6)           |
| Washington                             | 227              | (81.9)           | 264              | (88.6)           | 197              | (90.4)           | 232              | (91.4)           | 205              | (85.9)           |
| West Virginia                          | 18               | (77.8)           | 16               | (100.0)          | 22               | (95.5)           | 16               | (68.8)           | 12               | (100.0)          |
| Wisconsin                              | 63               | (88.9)           | 57               | (78.9)           | 57               | (73.7)           | 55               | (83.6)           | 45               | (86.7)           |
| Wyoming                                | 4                | (100.0)          | 2                | (50.0)           | 5                | (80.0)           | 2                | (50.0)           | 6                | ...              |
| American Samoa <sup>5</sup>            | 2                | (100.0)          | 3                | ...              | 3                | (100.0)          | 3                | (66.7)           | 3                | (33.3)           |
| Fed. States of Micronesia <sup>5</sup> | 76               | ...              | 126              | ...              | 157              | ...              | 175              | (82.9)           | 162              | (92.0)           |
| Guam <sup>5</sup>                      | 52               | (84.6)           | 90               | (91.1)           | 84               | (89.3)           | 93               | (95.7)           | 87               | (94.3)           |
| Marshall Islands <sup>5</sup>          | 33               | ...              | 124              | ...              | 115              | (80.0)           | 108              | (88.0)           | 191              | ...              |
| N. Mariana Islands <sup>5</sup>        | 44               | ...              | 38               | (81.6)           | 34               | (70.6)           | 28               | (96.4)           | 25               | (96.0)           |
| Puerto Rico <sup>5</sup>               | 89               | (96.6)           | 81               | (97.5)           | 69               | (95.7)           | 51               | (94.1)           | 70               | (91.4)           |
| Republic of Palau <sup>5</sup>         | 9                | (66.7)           | 12               | ...              | 14               | ...              | 15               | ...              | 15               | ...              |
| U.S. Virgin Islands <sup>5</sup>       | 0                | ...              | 0                | ...              | 4                | (50.0)           | 0                | ...              | 0                | ...              |

<sup>1</sup> Most recent year for which data are available.

<sup>2</sup> Total cases for which therapy less than 1 year indicated in persons alive at diagnosis, with an initial regimen of one or more drugs prescribed, who did not die during therapy. Excludes persons with initial isolate rifampin resistant, or patient with meningeal disease, or pediatric patient (aged <15) with miliary disease or positive blood culture, and those who moved out of country during treatment.

<sup>3</sup> Percentage of total cases in persons who completed therapy within one year for whom therapy less than 1 year was indicated.

<sup>4</sup> Excludes New York City.

<sup>5</sup> Not included in U.S. totals.

**Note:** Ellipses indicate data not available.

See Technical Notes for description of Completion of Therapy calculation.



# **Morbidity Tables**

## **Cities and Metropolitan Statistical Areas, 2012**



**Table 62. Tuberculosis Cases in Selected Cities<sup>1</sup>: 2012 and 2011**

| City                     | Cases <sup>2</sup> |              |
|--------------------------|--------------------|--------------|
|                          | 2012               | 2011         |
| Albuquerque, NM          | 8                  | 12           |
| Anaheim, CA              | 31                 | 24           |
| Arlington, TX            | 20                 | 21           |
| Atlanta, GA              | 13                 | 15           |
| Austin, TX               | 33                 | 45           |
| Baltimore, MD            | 33                 | 39           |
| Birmingham, AL           | 15                 | 25           |
| Boston, MA               | 42                 | 44           |
| Buffalo, NY              | 13                 | 13           |
| Charlotte, NC            | 27                 | 35           |
| Chicago, IL              | 146                | 166          |
| Cincinnati, OH           | 11                 | 8            |
| Cleveland, OH            | 19                 | 27           |
| Colorado Springs, CO     | 4                  | 7            |
| Columbus, OH             | 37                 | 38           |
| Corpus Christi, TX       | 8                  | 10           |
| Dallas, TX               | 123                | 130          |
| Denver, CO               | 11                 | 23           |
| Detroit, MI              | 36                 | 47           |
| El Paso, TX              | 33                 | 28           |
| Fort Worth, TX           | 39                 | 35           |
| Fresno, CA               | 27                 | 25           |
| Honolulu, HI             | 57                 | 51           |
| Houston, TX              | 195                | 225          |
| Indianapolis, IN         | 39                 | 30           |
| Jacksonville, FL         | 81                 | 66           |
| Kansas City, MO          | 15                 | 16           |
| Las Vegas, NV            | 53                 | 76           |
| Long Beach, CA           | 34                 | 29           |
| Los Angeles, CA          | 231                | 246          |
| Louisville, KY           | 21                 | 22           |
| Memphis, TN              | 53                 | 45           |
| Mesa, AZ                 | 6                  | 13           |
| Miami, FL                | 88                 | 111          |
| Milwaukee, WI            | 26                 | 19           |
| Minneapolis, MN          | 41                 | 38           |
| Nashville, TN            | 27                 | 29           |
| Newark, NJ               | 20                 | 20           |
| New Orleans, LA          | 22                 | 24           |
| New York, NY             | 651                | 684          |
| Norfolk, VA              | 7                  | 4            |
| Oakland, CA              | 46                 | 45           |
| Omaha, NE                | 13                 | 11           |
| Philadelphia, PA         | 86                 | 101          |
| Phoenix, AZ              | 66                 | 56           |
| Pittsburgh, PA           | 2                  | 7            |
| Portland, OR             | 26                 | 30           |
| Sacramento, CA           | 33                 | 57           |
| St. Louis, MO            | 13                 | 31           |
| St. Paul, MN             | 35                 | 26           |
| San Antonio, TX          | 69                 | 94           |
| San Diego, CA            | 130                | 147          |
| San Francisco, CA        | 116                | 108          |
| San Jose, CA             | 102                | 116          |
| Santa Ana, CA            | 32                 | 40           |
| Seattle, WA              | 51                 | 53           |
| Tampa, FL                | 18                 | 17           |
| Toledo, OH               | 3                  | 1            |
| Tucson, AZ               | 13                 | 23           |
| Virginia Beach, VA       | 8                  | 4            |
| Washington, DC           | 37                 | 55           |
| Wichita, KS              | 7                  | 7            |
| <b>TOTAL - 62 CITIES</b> | <b>3,301</b>       | <b>3,593</b> |
| San Juan, PR             | 9                  | 17           |

<sup>1</sup> Historical list of cities.<sup>2</sup> Case counts are based on verified cases residing within city limits. Excludes cases known to not be within city limits; residence within city limits was determined by the health department.

**Table 63. Tuberculosis Cases and Case Rates per 100,000 Population: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2012 and 2011**

| Metropolitan Statistical Area             | Cases |      | Case Rates |      | Population Estimates 2012 |
|-------------------------------------------|-------|------|------------|------|---------------------------|
|                                           | 2012  | 2011 | 2012       | 2011 |                           |
| Akron, OH                                 | 7     | 2    | 1.0        | 0.3  | 702,262                   |
| Albany-Schenectady-Troy, NY               | 13    | 13   | 1.5        | 1.5  | 874,646                   |
| Albuquerque, NM                           | 10    | 14   | 1.1        | 1.6  | 901,700                   |
| Allentown-Bethlehem-Easton, PA-NJ         | 6     | 10   | 0.7        | 1.2  | 827,171                   |
| Atlanta-Sandy Springs-Roswell, GA         | 210   | 212  | 3.8        | 3.9  | 5,457,831                 |
| Augusta-Richmond County, GA-SC            | 20    | 26   | 3.5        | 4.6  | 575,898                   |
| Austin-Round Rock, TX                     | 58    | 71   | 3.2        | 4.0  | 1,834,303                 |
| Bakersfield, CA                           | 34    | 40   | 4.0        | 4.7  | 856,158                   |
| Baltimore-Columbia-Towson, MD             | 79    | 91   | 2.9        | 3.3  | 2,753,149                 |
| Baton Rouge, LA                           | 19    | 20   | 2.3        | 2.5  | 815,298                   |
| Birmingham-Hoover, AL                     | 35    | 36   | 3.1        | 3.2  | 1,136,650                 |
| Boise City, ID                            | 6     | 5    | 0.9        | 0.8  | 637,896                   |
| Boston-Cambridge-Newton, MA-NH            | 175   | 157  | 3.8        | 3.4  | 4,640,802                 |
| Bridgeport-Stamford-Norwalk, CT           | 32    | 33   | 3.4        | 3.6  | 933,835                   |
| Buffalo-Cheektowaga-Niagara Falls, NY     | 21    | 15   | 1.9        | 1.3  | 1,134,210                 |
| Cape Coral-Fort Myers, FL                 | 26    | 26   | 4.0        | 4.1  | 645,293                   |
| Charleston-North Charleston, SC           | 29    | 21   | 4.2        | 3.1  | 697,439                   |
| Charlotte-Concord-Gastonia, NC-SC         | 58    | 64   | 2.5        | 2.8  | 2,296,569                 |
| Chattanooga, TN-GA                        | 11    | 10   | 2.0        | 1.9  | 537,889                   |
| Chicago-Naperville-Elgin, IL-IN-WI        | 307   | 335  | 3.2        | 3.5  | 9,522,434                 |
| Cincinnati, OH-KY-IN                      | 30    | 19   | 1.4        | 0.9  | 2,128,603                 |
| Cleveland-Elyria, OH                      | 35    | 43   | 1.7        | 2.1  | 2,063,535                 |
| Colorado Springs, CO                      | 6     | 7    | 0.9        | 1.1  | 668,353                   |
| Columbia, SC                              | 12    | 16   | 1.5        | 2.1  | 784,745                   |
| Columbus, OH                              | 48    | 57   | 2.5        | 3.0  | 1,944,002                 |
| Dallas-Fort Worth-Arlington, TX           | 300   | 342  | 4.5        | 5.2  | 6,700,991                 |
| Dayton, OH                                | 8     | 9    | 1.0        | 1.1  | 800,972                   |
| Denver-Aurora-Lakewood, CO                | 32    | 48   | 1.2        | 1.8  | 2,645,209                 |
| Des Moines-West Des Moines, IA            | 13    | 12   | 2.2        | 2.1  | 588,999                   |
| Detroit-Warren-Dearborn, MI               | 95    | 107  | 2.2        | 2.5  | 4,292,060                 |
| Durham-Chapel Hill, NC                    | 14    | 13   | 2.7        | 2.5  | 522,826                   |
| El Paso, TX                               | 37    | 37   | 4.5        | 4.5  | 830,735                   |
| Fresno, CA                                | 35    | 46   | 3.7        | 4.9  | 947,895                   |
| Grand Rapids-Wyoming, MI                  | 19    | 25   | 1.9        | 2.5  | 1,005,648                 |
| Greensboro-High Point, NC                 | 19    | 26   | 2.6        | 3.6  | 736,065                   |
| Greenville-Anderson-Mauldin, SC           | 11    | 17   | 1.3        | 2.0  | 842,853                   |
| Harrisburg-Carlisle, PA                   | 14    | 7    | 2.5        | 1.3  | 553,980                   |
| Hartford-West Hartford-East Hartford, CT  | 23    | 21   | 1.9        | 1.7  | 1,214,400                 |
| Houston-The Woodlands-Sugar Land, TX      | 340   | 397  | 5.5        | 6.6  | 6,177,035                 |
| Indianapolis-Carmel-Anderson, IN          | 47    | 45   | 2.4        | 2.4  | 1,928,982                 |
| Jackson, MS                               | 31    | 41   | 5.4        | 7.1  | 576,800                   |
| Jacksonville, FL                          | 99    | 77   | 7.2        | 5.7  | 1,377,850                 |
| Kansas City, MO-KS                        | 35    | 35   | 1.7        | 1.7  | 2,038,724                 |
| Knoxville, TN                             | 13    | 2    | 1.5        | 0.2  | 848,350                   |
| Lakeland-Winter Haven, FL                 | 15    | 16   | 2.4        | 2.6  | 616,158                   |
| Lancaster, PA                             | 9     | 5    | 1.7        | 1.0  | 526,823                   |
| Las Vegas-Henderson-Paradise, NV          | 68    | 84   | 3.4        | 4.3  | 2,000,759                 |
| Little Rock-North Little Rock-Conway, AR  | 11    | 19   | 1.5        | 2.7  | 717,666                   |
| Los Angeles-Long Beach-Anaheim, CA        | 862   | 922  | 6.6        | 7.1  | 13,052,921                |
| Louisville/Jefferson County, KY-IN        | 29    | 27   | 2.3        | 2.2  | 1,251,351                 |
| Madison, WI                               | 11    | 12   | 1.8        | 2.0  | 620,778                   |
| McAllen-Edinburg-Mission, TX              | 72    | 80   | 8.9        | 10.1 | 806,552                   |
| Memphis, TN-MS-AR                         | 66    | 53   | 4.9        | 4.0  | 1,341,690                 |
| Miami-Fort Lauderdale-West Palm Beach, FL | 230   | 292  | 4.0        | 5.1  | 5,762,717                 |
| Milwaukee-Waukesha-West Allis, WI         | 32    | 30   | 2.0        | 1.9  | 1,566,981                 |
| Minneapolis-St. Paul-Bloomington, MN-WI   | 140   | 103  | 4.1        | 3.0  | 3,422,264                 |
| Modesto, CA                               | 7     | 9    | 1.3        | 1.7  | 521,726                   |

**Table 63. (Cont'd) Tuberculosis Cases and Case Rates per 100,000 Population: Metropolitan Statistical Areas with  $\geq$ 500,000 Population, 2012 and 2011**

| Metropolitan Statistical Area                 | Cases        |              | Case Rates |            | Population Estimates 2012 |
|-----------------------------------------------|--------------|--------------|------------|------------|---------------------------|
|                                               | 2012         | 2011         | 2012       | 2011       |                           |
| Nashville-Davidson-Murfreesboro--Franklin, TN | 49           | 55           | 2.8        | 3.2        | 1,726,693                 |
| New Haven-Milford, CT                         | 15           | 19           | 1.7        | 2.2        | 862,813                   |
| New Orleans-Metairie, LA                      | 53           | 61           | 4.3        | 5.0        | 1,227,096                 |
| New York-Newark-Jersey City, NY-NJ-PA         | 1,029        | 1,099        | 5.2        | 5.6        | 19,831,858                |
| Northport-Sarasota-Bradenton, FL              | 14           | 24           | 1.9        | 3.4        | 720,042                   |
| Ogden-Clearfield, UT                          | 2            | 4            | 0.3        | 0.7        | 612,441                   |
| Oklahoma City, OK                             | 32           | 34           | 2.5        | 2.7        | 1,296,565                 |
| Omaha-Council Bluffs, NE-IA                   | 13           | 12           | 1.5        | 1.4        | 885,624                   |
| Orlando-Kissimmee-Sanford, FL                 | 94           | 80           | 4.2        | 3.7        | 2,223,674                 |
| Oxnard-Thousand Oaks-Ventura, CA              | 35           | 35           | 4.2        | 4.2        | 835,981                   |
| Palm Bay-Melbourne-Titusville, FL             | 12           | 9            | 2.2        | 1.7        | 547,307                   |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD   | 180          | 196          | 3.0        | 3.3        | 6,018,800                 |
| Phoenix-Mesa-Scottsdale, AZ                   | 150          | 171          | 3.5        | 4.0        | 4,329,534                 |
| Pittsburgh, PA                                | 23           | 31           | 1.0        | 1.3        | 2,360,733                 |
| Portland-South Portland, ME                   | 12           | 3            | 2.3        | 0.6        | 518,117                   |
| Portland-Vancouver-Hillsboro, OR-WA           | 49           | 60           | 2.1        | 2.7        | 2,289,800                 |
| Providence-Warwick, RI-MA                     | 35           | 34           | 2.2        | 2.1        | 1,601,374                 |
| Provo-Orem, UT                                | 3            | 4            | 0.5        | 0.7        | 550,845                   |
| Raleigh, NC                                   | 20           | 31           | 1.7        | 2.7        | 1,188,564                 |
| Richmond, VA                                  | 24           | 29           | 1.9        | 2.4        | 1,231,980                 |
| Riverside-San Bernardino-Ontario, CA          | 114          | 121          | 2.6        | 2.8        | 4,350,096                 |
| Rochester, NY                                 | 16           | 26           | 1.5        | 2.4        | 1,082,284                 |
| Sacramento-Roseville--Arden Arcade, CA        | 75           | 87           | 3.4        | 4.0        | 2,196,482                 |
| St. Louis, MO-IL                              | 42           | 49           | 1.5        | 1.8        | 2,795,794                 |
| Salt Lake City, UT                            | 22           | 17           | 2.0        | 1.5        | 1,123,712                 |
| San Antonio-New Braunfels, TX                 | 79           | 104          | 3.5        | 4.7        | 2,234,003                 |
| San Diego-Carlsbad, CA                        | 234          | 263          | 7.4        | 8.4        | 3,177,063                 |
| San Francisco-Oakland-Hayward, CA             | 382          | 372          | 8.6        | 8.5        | 4,455,560                 |
| San Jose-Sunnyvale-Santa Clara, CA            | 176          | 183          | 9.3        | 9.8        | 1,894,388                 |
| Scranton-Wilkes-Barre-Hazleton, PA            | 6            | 10           | 1.1        | 1.8        | 563,629                   |
| Seattle-Tacoma-Bellevue, WA                   | 145          | 154          | 4.1        | 4.4        | 3,552,157                 |
| Springfield, MA                               | 13           | 15           | 2.1        | 2.4        | 625,718                   |
| Stockton-Lodi, CA                             | 44           | 44           | 6.3        | 6.3        | 702,612                   |
| Syracuse, NY                                  | 14           | 8            | 2.1        | 1.2        | 660,934                   |
| Tampa-St. Petersburg-Clearwater, FL           | 77           | 81           | 2.7        | 2.9        | 2,842,878                 |
| Toledo, OH                                    | 8            | 2            | 1.3        | 0.3        | 608,711                   |
| Tucson, AZ                                    | 16           | 28           | 1.6        | 2.8        | 992,394                   |
| Tulsa, OK                                     | 27           | 25           | 2.8        | 2.6        | 951,880                   |
| Urban Honolulu, HI                            | 96           | 103          | 9.8        | 10.7       | 976,372                   |
| Virginia Beach-Norfolk-Newport News, VA-NC    | 31           | 20           | 1.8        | 1.2        | 1,699,925                 |
| Washington-Arlington-Alexandria, DC-VA-MD-WV  | 321          | 332          | 5.5        | 5.8        | 5,860,342                 |
| Wichita, KS                                   | 8            | 8            | 1.3        | 1.3        | 636,105                   |
| Worcester, MA-CT                              | 11           | 15           | 1.2        | 1.6        | 923,762                   |
| Youngstown-Warren-Boardman, OH-PA             | 4            | 3            | 0.7        | 0.5        | 558,206                   |
| <b>Total - 101 Areas</b>                      | <b>7,829</b> | <b>8,363</b> | <b>3.8</b> | <b>4.0</b> | <b>208,534,279</b>        |
| San Juan-Caguas-Guayanabo, PR                 | 56           | 23           | 2.3        | 0.9        | 2,444,002                 |

**Note:** 2012 and 2011 population case counts and rates updated using County Totals Datasets: Population, Population Change and Estimated Components of Population Change: April 1, 2010 to July 1, 2012 (<http://www.census.gov/popest/data/counties/totals/2012/files/CO-EST2012-Alldata.csv>) and Vintage 2009 County Population Datasets ([http://www.census.gov/popest/data/historical/2000s/vintage\\_2009/datasets.html](http://www.census.gov/popest/data/historical/2000s/vintage_2009/datasets.html)) (accessed August 12, 2013).

See Technical Notes for definition of MSA.

**Table 64. Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2012**

| Metropolitan Statistical Area             | Total Cases | Under 5 | 5–14 | 15–24 | 25–44 | 45–64 | $\geq 65$ | Unknown or Missing |
|-------------------------------------------|-------------|---------|------|-------|-------|-------|-----------|--------------------|
| Akron, OH                                 | 7           | 0       | 0    | 0     | 2     | 0     | 5         | 0                  |
| Albany-Schenectady-Troy, NY               | 13          | 0       | 0    | 0     | 4     | 1     | 8         | 0                  |
| Albuquerque, NM                           | 10          | 0       | 0    | 0     | 2     | 3     | 5         | 0                  |
| Allentown-Bethlehem-Easton, PA-NJ         | 6           | 0       | 0    | 2     | 2     | 1     | 1         | 0                  |
| Atlanta-Sandy Springs-Roswell, GA         | 210         | 6       | 10   | 25    | 81    | 68    | 20        | 0                  |
| Augusta-Richmond County, GA-SC            | 20          | 1       | 0    | 6     | 3     | 7     | 3         | 0                  |
| Austin-Round Rock, TX                     | 58          | 0       | 2    | 5     | 25    | 20    | 6         | 0                  |
| Bakersfield, CA                           | 34          | 2       | 1    | 1     | 10    | 7     | 13        | 0                  |
| Baltimore-Columbia-Towson, MD             | 79          | 2       | 1    | 9     | 27    | 22    | 18        | 0                  |
| Baton Rouge, LA                           | 19          | 1       | 0    | 2     | 8     | 6     | 2         | 0                  |
| Birmingham-Hoover, AL                     | 35          | 0       | 0    | 2     | 11    | 11    | 11        | 0                  |
| Boise City, ID                            | 6           | 1       | 0    | 2     | 1     | 1     | 1         | 0                  |
| Boston-Cambridge-Newton, MA-NH            | 175         | 1       | 1    | 20    | 64    | 50    | 39        | 0                  |
| Bridgeport-Stamford-Norwalk, CT           | 32          | 1       | 0    | 3     | 19    | 4     | 5         | 0                  |
| Buffalo-Cheektowaga-Niagara Falls, NY     | 21          | 0       | 1    | 0     | 6     | 9     | 5         | 0                  |
| Cape Coral-Fort Myers, FL                 | 26          | 1       | 2    | 3     | 6     | 9     | 5         | 0                  |
| Charleston-North Charleston, SC           | 29          | 1       | 0    | 4     | 12    | 7     | 5         | 0                  |
| Charlotte-Concord-Gastonia, NC-SC         | 58          | 3       | 2    | 6     | 21    | 18    | 8         | 0                  |
| Chattanooga, TN-GA                        | 11          | 0       | 0    | 0     | 4     | 4     | 3         | 0                  |
| Chicago-Naperville-Elgin, IL-IN-WI        | 307         | 6       | 5    | 24    | 89    | 116   | 67        | 0                  |
| Cincinnati, OH-KY-IN                      | 30          | 0       | 0    | 4     | 14    | 8     | 4         | 0                  |
| Cleveland-Elyria, OH                      | 35          | 0       | 1    | 6     | 9     | 9     | 10        | 0                  |
| Colorado Springs, CO                      | 6           | 0       | 0    | 0     | 2     | 2     | 2         | 0                  |
| Columbia, SC                              | 12          | 0       | 0    | 0     | 3     | 3     | 6         | 0                  |
| Columbus, OH                              | 48          | 3       | 3    | 6     | 21    | 11    | 4         | 0                  |
| Dallas-Fort Worth-Arlington, TX           | 300         | 10      | 6    | 34    | 103   | 105   | 42        | 0                  |
| Dayton, OH                                | 8           | 0       | 0    | 1     | 2     | 2     | 3         | 0                  |
| Denver-Aurora-Lakewood, CO                | 32          | 0       | 3    | 4     | 6     | 11    | 8         | 0                  |
| Des Moines-West Des Moines, IA            | 13          | 1       | 0    | 0     | 7     | 3     | 2         | 0                  |
| Detroit-Warren-Dearborn, MI               | 95          | 1       | 0    | 8     | 24    | 30    | 32        | 0                  |
| Durham-Chapel Hill, NC                    | 14          | 0       | 0    | 1     | 11    | 1     | 1         | 0                  |
| El Paso, TX                               | 37          | 1       | 0    | 1     | 7     | 18    | 10        | 0                  |
| Fresno, CA                                | 35          | 0       | 0    | 5     | 8     | 8     | 14        | 0                  |
| Grand Rapids-Wyoming, MI                  | 19          | 2       | 0    | 4     | 6     | 4     | 3         | 0                  |
| Greensboro-High Point, NC                 | 19          | 0       | 0    | 4     | 3     | 9     | 3         | 0                  |
| Greenville-Anderson-Mauldin, SC           | 11          | 0       | 2    | 0     | 1     | 6     | 2         | 0                  |
| Harrisburg-Carlisle, PA                   | 14          | 0       | 1    | 1     | 8     | 3     | 1         | 0                  |
| Hartford-West Hartford-East Hartford, CT  | 23          | 0       | 0    | 2     | 12    | 2     | 7         | 0                  |
| Houston-The Woodlands-Sugar Land, TX      | 340         | 11      | 5    | 41    | 101   | 130   | 52        | 0                  |
| Indianapolis-Carmel-Anderson, IN          | 47          | 3       | 3    | 3     | 21    | 11    | 6         | 0                  |
| Jackson, MS                               | 31          | 0       | 1    | 3     | 7     | 13    | 7         | 0                  |
| Jacksonville, FL                          | 99          | 0       | 4    | 7     | 30    | 46    | 12        | 0                  |
| Kansas City, MO-KS                        | 35          | 1       | 1    | 6     | 13    | 7     | 7         | 0                  |
| Knoxville, TN                             | 13          | 0       | 0    | 2     | 4     | 2     | 5         | 0                  |
| Lakeland-Winter Haven, FL                 | 15          | 0       | 0    | 2     | 2     | 8     | 3         | 0                  |
| Lancaster, PA                             | 9           | 1       | 2    | 0     | 0     | 4     | 2         | 0                  |
| Las Vegas-Henderson-Paradise, NV          | 68          | 5       | 5    | 12    | 13    | 19    | 14        | 0                  |
| Little Rock-North Little Rock-Conway, AR  | 11          | 0       | 1    | 1     | 2     | 4     | 3         | 0                  |
| Los Angeles-Long Beach-Anaheim, CA        | 862         | 13      | 9    | 78    | 195   | 308   | 259       | 0                  |
| Louisville/Jefferson County, KY-IN        | 29          | 0       | 0    | 3     | 8     | 15    | 3         | 0                  |
| Madison, WI                               | 11          | 0       | 0    | 2     | 6     | 1     | 2         | 0                  |
| McAllen-Edinburg-Mission, TX              | 72          | 3       | 0    | 10    | 15    | 25    | 19        | 0                  |
| Memphis, TN-MS-AR                         | 66          | 4       | 5    | 4     | 19    | 24    | 10        | 0                  |
| Miami-Fort Lauderdale-West Palm Beach, FL | 230         | 5       | 7    | 24    | 72    | 73    | 49        | 0                  |
| Milwaukee-Waukesha-West Allis, WI         | 32          | 3       | 0    | 3     | 10    | 10    | 5         | 1                  |
| Minneapolis-St. Paul-Bloomington, MN-WI   | 140         | 6       | 13   | 24    | 56    | 24    | 17        | 0                  |

**Table 64. (Cont'd) Tuberculosis Cases by Age Group: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2012**

| Metropolitan Statistical Area                 | Total Cases  | Under 5    | 5–14       | 15–24      | 25–44        | 45–64        | $\geq 65$    | Unknown or Missing |
|-----------------------------------------------|--------------|------------|------------|------------|--------------|--------------|--------------|--------------------|
| Modesto, CA                                   | 7            | 0          | 0          | 1          | 1            | 5            | 0            | 0                  |
| Nashville-Davidson-Murfreesboro--Franklin, TN | 49           | 1          | 0          | 5          | 17           | 21           | 5            | 0                  |
| New Haven-Milford, CT                         | 15           | 0          | 0          | 1          | 8            | 2            | 4            | 0                  |
| New Orleans-Metairie, LA                      | 53           | 0          | 1          | 5          | 23           | 14           | 10           | 0                  |
| New York-Newark-Jersey City, NY-NJ-PA         | 1,029        | 9          | 17         | 87         | 381          | 328          | 207          | 0                  |
| Northport-Sarasota-Bradenton, FL              | 14           | 1          | 0          | 0          | 7            | 3            | 3            | 0                  |
| Ogden-Clearfield, UT                          | 2            | 0          | 0          | 0          | 2            | 0            | 0            | 0                  |
| Oklahoma City, OK                             | 32           | 0          | 1          | 2          | 10           | 10           | 9            | 0                  |
| Omaha-Council Bluffs, NE-IA                   | 13           | 0          | 0          | 1          | 9            | 3            | 0            | 0                  |
| Orlando-Kissimmee-Sanford, FL                 | 94           | 2          | 1          | 14         | 31           | 34           | 12           | 0                  |
| Oxnard-Thousand Oaks-Ventura, CA              | 35           | 1          | 5          | 4          | 10           | 9            | 6            | 0                  |
| Palm Bay-Melbourne-Titusville, FL             | 12           | 2          | 0          | 0          | 3            | 5            | 2            | 0                  |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD   | 180          | 2          | 1          | 13         | 48           | 62           | 54           | 0                  |
| Phoenix-Mesa-Scottsdale, AZ                   | 150          | 3          | 3          | 28         | 63           | 31           | 22           | 0                  |
| Pittsburgh, PA                                | 23           | 0          | 0          | 3          | 5            | 9            | 6            | 0                  |
| Portland-South Portland, ME                   | 12           | 1          | 0          | 1          | 5            | 3            | 2            | 0                  |
| Portland-Vancouver-Hillsboro, OR-WA           | 49           | 0          | 1          | 2          | 18           | 18           | 10           | 0                  |
| Providence-Warwick, RI-MA                     | 35           | 2          | 0          | 7          | 9            | 5            | 12           | 0                  |
| Provo-Orem, UT                                | 3            | 0          | 0          | 1          | 2            | 0            | 0            | 0                  |
| Raleigh, NC                                   | 20           | 2          | 1          | 2          | 9            | 2            | 4            | 0                  |
| Richmond, VA                                  | 24           | 2          | 1          | 3          | 4            | 8            | 6            | 0                  |
| Riverside-San Bernardino-Ontario, CA          | 114          | 2          | 1          | 10         | 25           | 44           | 31           | 1                  |
| Rochester, NY                                 | 16           | 0          | 2          | 2          | 7            | 2            | 3            | 0                  |
| Sacramento-Roseville-Arden Arcade, CA         | 75           | 1          | 1          | 8          | 28           | 18           | 19           | 0                  |
| St. Louis, MO-IL                              | 42           | 0          | 0          | 2          | 15           | 13           | 12           | 0                  |
| Salt Lake City, UT                            | 22           | 1          | 0          | 1          | 5            | 9            | 6            | 0                  |
| San Antonio-New Braunfels, TX                 | 79           | 3          | 3          | 12         | 19           | 31           | 11           | 0                  |
| San Diego-Carlsbad, CA                        | 234          | 6          | 5          | 41         | 68           | 65           | 49           | 0                  |
| San Francisco-Oakland-Hayward, CA             | 382          | 4          | 6          | 32         | 120          | 114          | 106          | 0                  |
| San Jose-Sunnyvale-Santa Clara, CA            | 176          | 3          | 3          | 13         | 67           | 47           | 43           | 0                  |
| Scranton-Wilkes-Barre-Hazleton, PA            | 6            | 0          | 0          | 1          | 3            | 1            | 1            | 0                  |
| Seattle-Tacoma-Bellevue, WA                   | 145          | 6          | 4          | 10         | 59           | 29           | 37           | 0                  |
| Springfield, MA                               | 13           | 0          | 0          | 1          | 7            | 2            | 3            | 0                  |
| Stockton-Lodi, CA                             | 44           | 3          | 2          | 3          | 6            | 15           | 15           | 0                  |
| Syracuse, NY                                  | 14           | 1          | 1          | 2          | 3            | 4            | 3            | 0                  |
| Tampa-St. Petersburg-Clearwater, FL           | 77           | 1          | 1          | 4          | 23           | 32           | 16           | 0                  |
| Toledo, OH                                    | 8            | 0          | 0          | 0          | 2            | 3            | 3            | 0                  |
| Tucson, AZ                                    | 16           | 0          | 2          | 1          | 5            | 4            | 4            | 0                  |
| Tulsa, OK                                     | 27           | 7          | 2          | 4          | 6            | 6            | 2            | 0                  |
| Urban Honolulu, HI                            | 96           | 0          | 2          | 11         | 17           | 36           | 30           | 0                  |
| Virginia Beach-Norfolk-Newport News, VA-NC    | 31           | 2          | 0          | 6          | 9            | 8            | 6            | 0                  |
| Washington-Arlington-Alexandria, DC-VA-MD-WV  | 321          | 12         | 6          | 23         | 140          | 84           | 56           | 0                  |
| Wichita, KS                                   | 8            | 0          | 0          | 1          | 3            | 3            | 1            | 0                  |
| Worcester, MA-CT                              | 11           | 0          | 0          | 1          | 5            | 4            | 1            | 0                  |
| Youngstown-Warren-Boardman, OH-PA             | 4            | 0          | 0          | 0          | 0            | 1            | 3            | 0                  |
| <b>Total - 101 Areas</b>                      | <b>7,829</b> | <b>179</b> | <b>170</b> | <b>789</b> | <b>2,525</b> | <b>2,470</b> | <b>1,694</b> | <b>2</b>           |
| San Juan-Caguas-Guaynabo, PR                  | 56           | 0          | 0          | 1          | 16           | 23           | 16           | 0                  |

**Note:** See Technical Notes for definition of MSA.

**Table 65. Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2012**

| Metropolitan Statistical Area             | Total Cases | Hispanic or Latino <sup>1</sup> | American Indian or Alaska Native | Asian | Black or African American | Native Hawaiian or Other Pacific Islander | White | Multiple Race <sup>2</sup> | Unknown or Missing |
|-------------------------------------------|-------------|---------------------------------|----------------------------------|-------|---------------------------|-------------------------------------------|-------|----------------------------|--------------------|
| Akron, OH                                 | 7           | 0                               | 0                                | 3     | 0                         | 0                                         | 4     | 0                          | 0                  |
| Albany-Schenectady-Troy, NY               | 13          | 1                               | 0                                | 2     | 2                         | 0                                         | 4     | 2                          | 2                  |
| Albuquerque, NM                           | 10          | 7                               | 1                                | 1     | 0                         | 0                                         | 1     | 0                          | 0                  |
| Allentown-Bethlehem-Easton, PA-NJ         | 6           | 2                               | 0                                | 2     | 1                         | 0                                         | 1     | 0                          | 0                  |
| Atlanta-Sandy Springs-Roswell, GA         | 210         | 33                              | 0                                | 54    | 113                       | 0                                         | 9     | 0                          | 1                  |
| Augusta-Richmond County, GA-SC            | 20          | 2                               | 0                                | 1     | 13                        | 0                                         | 4     | 0                          | 0                  |
| Austin-Round Rock, TX                     | 58          | 25                              | 0                                | 16    | 6                         | 0                                         | 11    | 0                          | 0                  |
| Bakersfield, CA                           | 34          | 20                              | 0                                | 5     | 1                         | 0                                         | 3     | 5                          | 0                  |
| Baltimore-Columbia-Towson, MD             | 79          | 8                               | 0                                | 27    | 29                        | 0                                         | 15    | 0                          | 0                  |
| Baton Rouge, LA                           | 19          | 5                               | 0                                | 4     | 6                         | 0                                         | 4     | 0                          | 0                  |
| Birmingham-Hoover, AL                     | 35          | 2                               | 0                                | 0     | 23                        | 0                                         | 10    | 0                          | 0                  |
| Boise City, ID                            | 6           | 3                               | 0                                | 0     | 3                         | 0                                         | 0     | 0                          | 0                  |
| Boston-Cambridge-Newton, MA-NH            | 175         | 25                              | 0                                | 67    | 52                        | 0                                         | 30    | 1                          | 0                  |
| Bridgeport-Stamford-Norwalk, CT           | 32          | 11                              | 0                                | 11    | 7                         | 0                                         | 3     | 0                          | 0                  |
| Buffalo-Cheektowaga-Niagara Falls, NY     | 21          | 0                               | 0                                | 6     | 4                         | 1                                         | 7     | 2                          | 1                  |
| Cape Coral-Fort Myers, FL                 | 26          | 7                               | 0                                | 1     | 10                        | 0                                         | 8     | 0                          | 0                  |
| Charleston-North Charleston, SC           | 29          | 4                               | 0                                | 3     | 15                        | 0                                         | 7     | 0                          | 0                  |
| Charlotte-Concord-Gastonia, NC-SC         | 58          | 7                               | 0                                | 18    | 20                        | 0                                         | 9     | 4                          | 0                  |
| Chattanooga, TN-GA                        | 11          | 2                               | 0                                | 2     | 1                         | 0                                         | 6     | 0                          | 0                  |
| Chicago-Naperville-Elgin, IL-IN-WI        | 307         | 78                              | 0                                | 107   | 71                        | 3                                         | 48    | 0                          | 0                  |
| Cincinnati, OH-KY-IN                      | 30          | 7                               | 0                                | 5     | 9                         | 0                                         | 9     | 0                          | 0                  |
| Cleveland-Elyria, OH                      | 35          | 3                               | 0                                | 8     | 17                        | 0                                         | 6     | 1                          | 0                  |
| Colorado Springs, CO                      | 6           | 1                               | 0                                | 2     | 1                         | 0                                         | 2     | 0                          | 0                  |
| Columbia, SC                              | 12          | 0                               | 0                                | 3     | 6                         | 0                                         | 3     | 0                          | 0                  |
| Columbus, OH                              | 48          | 0                               | 0                                | 11    | 29                        | 0                                         | 8     | 0                          | 0                  |
| Dallas-Fort Worth-Arlington, TX           | 300         | 88                              | 0                                | 76    | 89                        | 1                                         | 46    | 0                          | 0                  |
| Dayton, OH                                | 8           | 2                               | 0                                | 2     | 2                         | 0                                         | 2     | 0                          | 0                  |
| Denver-Aurora-Lakewood, CO                | 32          | 13                              | 0                                | 12    | 4                         | 0                                         | 2     | 1                          | 0                  |
| Des Moines-West Des Moines, IA            | 13          | 2                               | 0                                | 4     | 5                         | 0                                         | 2     | 0                          | 0                  |
| Detroit-Warren-Dearborn, MI               | 95          | 7                               | 0                                | 31    | 33                        | 0                                         | 19    | 0                          | 5                  |
| Durham-Chapel Hill, NC                    | 14          | 5                               | 0                                | 3     | 3                         | 0                                         | 2     | 1                          | 0                  |
| El Paso, TX                               | 37          | 33                              | 0                                | 2     | 1                         | 0                                         | 1     | 0                          | 0                  |
| Fresno, CA                                | 35          | 19                              | 0                                | 9     | 0                         | 0                                         | 3     | 4                          | 0                  |
| Grand Rapids-Wyoming, MI                  | 19          | 7                               | 0                                | 7     | 2                         | 0                                         | 2     | 0                          | 1                  |
| Greensboro-High Point, NC                 | 19          | 1                               | 0                                | 12    | 4                         | 0                                         | 2     | 0                          | 0                  |
| Greenville-Anderson-Mauldin, SC           | 11          | 1                               | 0                                | 2     | 3                         | 0                                         | 5     | 0                          | 0                  |
| Harrisburg-Carlisle, PA                   | 14          | 0                               | 0                                | 6     | 5                         | 0                                         | 3     | 0                          | 0                  |
| Hartford-West Hartford-East Hartford, CT  | 23          | 4                               | 0                                | 11    | 3                         | 0                                         | 2     | 3                          | 0                  |
| Houston-The Woodlands-Sugar Land, TX      | 340         | 152                             | 0                                | 66    | 74                        | 2                                         | 46    | 0                          | 0                  |
| Indianapolis-Carmel-Anderson, IN          | 47          | 6                               | 0                                | 14    | 16                        | 0                                         | 11    | 0                          | 0                  |
| Jackson, MS                               | 31          | 5                               | 0                                | 2     | 18                        | 0                                         | 6     | 0                          | 0                  |
| Jacksonville, FL                          | 99          | 4                               | 0                                | 14    | 53                        | 0                                         | 28    | 0                          | 0                  |
| Kansas City, MO-KS                        | 35          | 7                               | 0                                | 12    | 8                         | 0                                         | 7     | 0                          | 1                  |
| Knoxville, TN                             | 13          | 1                               | 0                                | 1     | 2                         | 2                                         | 7     | 0                          | 0                  |
| Lakeland-Winter Haven, FL                 | 15          | 3                               | 0                                | 1     | 3                         | 0                                         | 8     | 0                          | 0                  |
| Lancaster, PA                             | 9           | 2                               | 0                                | 1     | 1                         | 0                                         | 3     | 2                          | 0                  |
| Las Vegas-Henderson-Paradise, NV          | 68          | 19                              | 0                                | 32    | 5                         | 0                                         | 12    | 0                          | 0                  |
| Little Rock-North Little Rock-Conway, AR  | 11          | 2                               | 0                                | 0     | 2                         | 0                                         | 7     | 0                          | 0                  |
| Los Angeles-Long Beach-Anaheim, CA        | 862         | 344                             | 0                                | 382   | 62                        | 2                                         | 54    | 18                         | 0                  |
| Louisville/Jefferson County, KY-IN        | 29          | 1                               | 0                                | 7     | 8                         | 0                                         | 13    | 0                          | 0                  |
| Madison, WI                               | 11          | 1                               | 0                                | 8     | 1                         | 0                                         | 1     | 0                          | 0                  |
| McAllen-Edinburg-Mission, TX              | 72          | 70                              | 0                                | 1     | 0                         | 0                                         | 1     | 0                          | 0                  |
| Memphis, TN-MS-AR                         | 66          | 7                               | 0                                | 5     | 46                        | 0                                         | 8     | 0                          | 0                  |
| Miami-Fort Lauderdale-West Palm Beach, FL | 230         | 101                             | 0                                | 16    | 85                        | 0                                         | 28    | 0                          | 0                  |
| Milwaukee-Waukesha-West Allis, WI         | 32          | 10                              | 0                                | 12    | 4                         | 0                                         | 3     | 0                          | 3                  |
| Minneapolis-St. Paul-Bloomington, MN-WI   | 140         | 14                              | 0                                | 37    | 80                        | 0                                         | 9     | 0                          | 0                  |
| Modesto, CA                               | 7           | 3                               | 0                                | 1     | 0                         | 0                                         | 2     | 1                          | 0                  |

**Table 65. (Cont'd) Tuberculosis Cases by Hispanic Ethnicity and Non-Hispanic Race: Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2012**

| Metropolitan Statistical Area                 | Total Cases  | Hispanic or Latino <sup>1</sup> | American Indian or Alaska Native | Asian        | Black or African American | Native Hawaiian or Other Pacific Islander | White        | Multiple Race <sup>2</sup> | Unknown or Missing |
|-----------------------------------------------|--------------|---------------------------------|----------------------------------|--------------|---------------------------|-------------------------------------------|--------------|----------------------------|--------------------|
| Nashville-Davidson-Murfreesboro--Franklin, TN | 49           | 5                               | 0                                | 11           | 19                        | 0                                         | 14           | 0                          | 0                  |
| New Haven-Milford, CT                         | 15           | 2                               | 0                                | 5            | 5                         | 0                                         | 3            | 0                          | 0                  |
| New Orleans-Metairie, LA                      | 53           | 5                               | 0                                | 9            | 27                        | 0                                         | 12           | 0                          | 0                  |
| New York-Newark-Jersey City, NY-NJ-PA         | 1,029        | 286                             | 0                                | 420          | 194                       | 0                                         | 91           | 28                         | 10                 |
| Northport-Sarasota-Bradenton, FL              | 14           | 2                               | 0                                | 3            | 3                         | 0                                         | 5            | 1                          | 0                  |
| Ogden-Clearfield, UT                          | 2            | 1                               | 0                                | 0            | 0                         | 0                                         | 1            | 0                          | 0                  |
| Oklahoma City, OK                             | 32           | 7                               | 5                                | 3            | 5                         | 0                                         | 11           | 0                          | 1                  |
| Omaha-Council Bluffs, NE-IA                   | 13           | 2                               | 0                                | 2            | 5                         | 0                                         | 3            | 1                          | 0                  |
| Orlando-Kissimmee-Sanford, FL                 | 94           | 24                              | 0                                | 10           | 36                        | 0                                         | 24           | 0                          | 0                  |
| Oxnard-Thousand Oaks-Ventura, CA              | 35           | 19                              | 0                                | 9            | 1                         | 0                                         | 5            | 1                          | 0                  |
| Palm Bay-Melbourne-Titusville, FL             | 12           | 1                               | 0                                | 2            | 2                         | 0                                         | 7            | 0                          | 0                  |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD   | 180          | 21                              | 0                                | 71           | 59                        | 0                                         | 26           | 3                          | 0                  |
| Phoenix-Mesa-Scottsdale, AZ                   | 150          | 87                              | 6                                | 25           | 22                        | 0                                         | 10           | 0                          | 0                  |
| Pittsburgh, PA                                | 23           | 1                               | 0                                | 7            | 6                         | 0                                         | 9            | 0                          | 0                  |
| Portland-South Portland, ME                   | 12           | 1                               | 0                                | 1            | 4                         | 1                                         | 5            | 0                          | 0                  |
| Portland-Vancouver-Hillsboro, OR-WA           | 49           | 13                              | 1                                | 24           | 3                         | 0                                         | 8            | 0                          | 0                  |
| Providence-Warwick, RI-MA                     | 35           | 10                              | 0                                | 9            | 7                         | 0                                         | 9            | 0                          | 0                  |
| Provo-Orem, UT                                | 3            | 2                               | 0                                | 0            | 0                         | 0                                         | 1            | 0                          | 0                  |
| Raleigh, NC                                   | 20           | 3                               | 0                                | 8            | 7                         | 0                                         | 1            | 1                          | 0                  |
| Richmond, VA                                  | 24           | 1                               | 0                                | 7            | 10                        | 0                                         | 6            | 0                          | 0                  |
| Riverside-San Bernardino-Ontario, CA          | 114          | 64                              | 1                                | 32           | 7                         | 0                                         | 8            | 2                          | 0                  |
| Rochester, NY                                 | 16           | 2                               | 0                                | 6            | 4                         | 0                                         | 3            | 0                          | 1                  |
| Sacramento-Roseville--Arden Arcade, CA        | 75           | 12                              | 0                                | 42           | 4                         | 4                                         | 11           | 2                          | 0                  |
| St. Louis, MO-IL                              | 42           | 4                               | 0                                | 12           | 14                        | 0                                         | 11           | 0                          | 1                  |
| Salt Lake City, UT                            | 22           | 5                               | 1                                | 7            | 3                         | 2                                         | 4            | 0                          | 0                  |
| San Antonio-New Braunfels, TX                 | 79           | 50                              | 0                                | 9            | 11                        | 0                                         | 9            | 0                          | 0                  |
| San Diego-Carlsbad, CA                        | 234          | 129                             | 0                                | 71           | 12                        | 2                                         | 15           | 5                          | 0                  |
| San Francisco-Oakland-Hayward, CA             | 382          | 57                              | 3                                | 225          | 38                        | 6                                         | 47           | 6                          | 0                  |
| San Jose-Sunnyvale-Santa Clara, CA            | 176          | 25                              | 0                                | 110          | 8                         | 0                                         | 10           | 23                         | 0                  |
| Scranton-Wilkes-Barre-Hazleton, PA            | 6            | 1                               | 0                                | 0            | 1                         | 0                                         | 4            | 0                          | 0                  |
| Seattle-Tacoma-Bellevue, WA                   | 145          | 15                              | 3                                | 68           | 34                        | 5                                         | 18           | 1                          | 1                  |
| Springfield, MA                               | 13           | 4                               | 0                                | 6            | 2                         | 0                                         | 1            | 0                          | 0                  |
| Stockton-Lodi, CA                             | 44           | 11                              | 0                                | 28           | 0                         | 0                                         | 2            | 3                          | 0                  |
| Syracuse, NY                                  | 14           | 2                               | 0                                | 1            | 5                         | 0                                         | 4            | 2                          | 0                  |
| Tampa-St. Petersburg-Clearwater, FL           | 77           | 13                              | 0                                | 18           | 19                        | 1                                         | 26           | 0                          | 0                  |
| Toledo, OH                                    | 8            | 1                               | 0                                | 0            | 2                         | 0                                         | 5            | 0                          | 0                  |
| Tucson, AZ                                    | 16           | 6                               | 2                                | 2            | 2                         | 0                                         | 4            | 0                          | 0                  |
| Tulsa, OK                                     | 27           | 5                               | 1                                | 11           | 7                         | 0                                         | 3            | 0                          | 0                  |
| Urban Honolulu, HI                            | 96           | 2                               | 0                                | 75           | 0                         | 13                                        | 4            | 2                          | 0                  |
| Virginia Beach-Norfolk-Newport News, VA-NC    | 31           | 5                               | 0                                | 13           | 9                         | 0                                         | 4            | 0                          | 0                  |
| Washington-Arlington-Alexandria, DC-VA-MD-WV  | 321          | 65                              | 0                                | 113          | 127                       | 0                                         | 15           | 1                          | 0                  |
| Wichita, KS                                   | 8            | 2                               | 0                                | 2            | 4                         | 0                                         | 0            | 0                          | 0                  |
| Worcester, MA-CT                              | 11           | 1                               | 0                                | 4            | 2                         | 0                                         | 3            | 1                          | 0                  |
| Youngstown-Warren-Boardman, OH-PA             | 4            | 0                               | 0                                | 1            | 2                         | 0                                         | 1            | 0                          | 0                  |
| <b>Total - 101 Areas</b>                      | <b>7,829</b> | <b>2,161</b>                    | <b>24</b>                        | <b>2,630</b> | <b>1,793</b>              | <b>45</b>                                 | <b>1,020</b> | <b>128</b>                 | <b>28</b>          |
| San Juan-Caguas-Guaynabo, PR                  | 56           | 55                              | 0                                | 0            | 1                         | 0                                         | 0            | 0                          | 0                  |

<sup>1</sup> Persons of Hispanic or Latino origin may be of any race or multiple race.

<sup>2</sup> Indicates two or more races reported for a person.

**Note:** Case counts for race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) are mutually exclusive and do not include persons of Hispanic ethnicity or multiple race. Multiple Race does not include persons of Hispanic ethnicity.

See Technical Notes for definition of MSA and Hispanic ethnicity and non-Hispanic race.

**Table 66. Tuberculosis Cases and Percentages, U.S.-born Persons and Foreign-born Persons<sup>1</sup>: Metropolitan Statistical Areas with ≥500,000 Population, 2012**

| Metropolitan Statistical Area             | Total Cases | U.S.-born Persons |        | Foreign-born Persons |        | Unknown |       |
|-------------------------------------------|-------------|-------------------|--------|----------------------|--------|---------|-------|
|                                           |             | No.               | (%)    | No.                  | (%)    | No.     | (%)   |
| Akron, OH                                 | 7           | 3                 | (42.9) | 4                    | (57.1) | 0       | (0.0) |
| Albany-Schenectady-Troy, NY               | 13          | 6                 | (46.2) | 7                    | (53.8) | 0       | (0.0) |
| Albuquerque, NM                           | 10          | 4                 | (40.0) | 6                    | (60.0) | 0       | (0.0) |
| Allentown-Bethlehem-Easton, PA-NJ         | 6           | 2                 | (33.3) | 4                    | (66.7) | 0       | (0.0) |
| Atlanta-Sandy Springs-Roswell, GA         | 210         | 90                | (42.9) | 119                  | (56.7) | 1       | (0.5) |
| Augusta-Richmond County, GA-SC            | 20          | 18                | (90.0) | 2                    | (10.0) | 0       | (0.0) |
| Austin-Round Rock, TX                     | 58          | 24                | (41.4) | 34                   | (58.6) | 0       | (0.0) |
| Bakersfield, CA                           | 34          | 9                 | (26.5) | 25                   | (73.5) | 0       | (0.0) |
| Baltimore-Columbia-Towson, MD             | 79          | 30                | (38.0) | 48                   | (60.8) | 1       | (1.3) |
| Baton Rouge, LA                           | 19          | 10                | (52.6) | 9                    | (47.4) | 0       | (0.0) |
| Birmingham-Hoover, AL                     | 35          | 32                | (91.4) | 3                    | (8.6)  | 0       | (0.0) |
| Boise City, ID                            | 6           | 1                 | (16.7) | 5                    | (83.3) | 0       | (0.0) |
| Boston-Cambridge-Newton, MA-NH            | 175         | 22                | (12.6) | 153                  | (87.4) | 0       | (0.0) |
| Bridgeport-Stamford-Norwalk, CT           | 32          | 7                 | (21.9) | 25                   | (78.1) | 0       | (0.0) |
| Buffalo-Cheektowaga-Niagara Falls, NY     | 21          | 7                 | (33.3) | 14                   | (66.7) | 0       | (0.0) |
| Cape Coral-Fort Myers, FL                 | 26          | 14                | (53.8) | 12                   | (46.2) | 0       | (0.0) |
| Charleston-North Charleston, SC           | 29          | 21                | (72.4) | 8                    | (27.6) | 0       | (0.0) |
| Charlotte-Concord-Gastonia, NC-SC         | 58          | 33                | (56.9) | 25                   | (43.1) | 0       | (0.0) |
| Chattanooga, TN-GA                        | 11          | 7                 | (63.6) | 4                    | (36.4) | 0       | (0.0) |
| Chicago-Naperville-Elgin, IL-IN-WI        | 307         | 93                | (30.3) | 214                  | (69.7) | 0       | (0.0) |
| Cincinnati, OH-KY-IN                      | 30          | 15                | (50.0) | 15                   | (50.0) | 0       | (0.0) |
| Cleveland-Elyria, OH                      | 35          | 21                | (60.0) | 14                   | (40.0) | 0       | (0.0) |
| Colorado Springs, CO                      | 6           | 2                 | (33.3) | 4                    | (66.7) | 0       | (0.0) |
| Columbia, SC                              | 12          | 8                 | (66.7) | 4                    | (33.3) | 0       | (0.0) |
| Columbus, OH                              | 48          | 16                | (33.3) | 32                   | (66.7) | 0       | (0.0) |
| Dallas-Fort Worth-Arlington, TX           | 300         | 133               | (44.3) | 167                  | (55.7) | 0       | (0.0) |
| Dayton, OH                                | 8           | 2                 | (25.0) | 6                    | (75.0) | 0       | (0.0) |
| Denver-Aurora-Lakewood, CO                | 32          | 9                 | (28.1) | 23                   | (71.9) | 0       | (0.0) |
| Des Moines-West Des Moines, IA            | 13          | 3                 | (23.1) | 10                   | (76.9) | 0       | (0.0) |
| Detroit-Warren-Dearborn, MI               | 95          | 51                | (53.7) | 44                   | (46.3) | 0       | (0.0) |
| Durham-Chapel Hill, NC                    | 14          | 5                 | (35.7) | 9                    | (64.3) | 0       | (0.0) |
| El Paso, TX                               | 37          | 10                | (27.0) | 27                   | (73.0) | 0       | (0.0) |
| Fresno, CA                                | 35          | 11                | (31.4) | 24                   | (68.6) | 0       | (0.0) |
| Grand Rapids-Wyoming, MI                  | 19          | 4                 | (21.1) | 15                   | (78.9) | 0       | (0.0) |
| Greensboro-High Point, NC                 | 19          | 4                 | (21.1) | 15                   | (78.9) | 0       | (0.0) |
| Greenville-Anderson-Maudlin, SC           | 11          | 8                 | (72.7) | 3                    | (27.3) | 0       | (0.0) |
| Harrisburg-Carlisle, PA                   | 14          | 4                 | (28.6) | 10                   | (71.4) | 0       | (0.0) |
| Hartford-West Hartford-East Hartford, CT  | 23          | 2                 | (8.7)  | 21                   | (91.3) | 0       | (0.0) |
| Houston-The Woodlands-Sugar Land, TX      | 340         | 150               | (44.1) | 190                  | (55.9) | 0       | (0.0) |
| Indianapolis-Carmel-Anderson, IN          | 47          | 23                | (48.9) | 24                   | (51.1) | 0       | (0.0) |
| Jackson, MS                               | 31          | 24                | (77.4) | 7                    | (22.6) | 0       | (0.0) |
| Jacksonville, FL                          | 99          | 77                | (77.8) | 22                   | (22.2) | 0       | (0.0) |
| Kansas City, MO-KS                        | 35          | 9                 | (25.7) | 26                   | (74.3) | 0       | (0.0) |
| Knoxville, TN                             | 13          | 9                 | (69.2) | 4                    | (30.8) | 0       | (0.0) |
| Lakeland-Winter Haven, FL                 | 15          | 10                | (66.7) | 5                    | (33.3) | 0       | (0.0) |
| Lancaster, PA                             | 9           | 5                 | (55.6) | 4                    | (44.4) | 0       | (0.0) |
| Las Vegas-Henderson-Paradise, NV          | 68          | 16                | (23.5) | 51                   | (75.0) | 1       | (1.5) |
| Little Rock-North Little Rock-Conway, AR  | 11          | 10                | (90.9) | 1                    | (9.1)  | 0       | (0.0) |
| Los Angeles-Long Beach-Anaheim, CA        | 862         | 149               | (17.3) | 713                  | (82.7) | 0       | (0.0) |
| Louisville/Jefferson County, KY-IN        | 29          | 18                | (62.1) | 11                   | (37.9) | 0       | (0.0) |
| Madison, WI                               | 11          | 2                 | (18.2) | 9                    | (81.8) | 0       | (0.0) |
| McAllen-Edinburg-Mission, TX              | 72          | 25                | (34.7) | 47                   | (65.3) | 0       | (0.0) |
| Memphis, TN-MS-AR                         | 66          | 52                | (78.8) | 14                   | (21.2) | 0       | (0.0) |
| Miami-Fort Lauderdale-West Palm Beach, FL | 230         | 65                | (28.3) | 165                  | (71.7) | 0       | (0.0) |
| Milwaukee-Waukesha-West Allis, WI         | 32          | 10                | (31.3) | 22                   | (68.8) | 0       | (0.0) |
| Minneapolis-St. Paul-Bloomington, MN-WI   | 140         | 20                | (14.3) | 120                  | (85.7) | 0       | (0.0) |
| Modesto, CA                               | 7           | 3                 | (42.9) | 4                    | (57.1) | 0       | (0.0) |

**Table 66. (Cont'd) Tuberculosis Cases and Percentages, U.S.-born Persons and Foreign-born Persons<sup>1</sup>: Metropolitan Statistical Areas with ≥500,000 Population, 2012**

| Metropolitan Statistical Area                 | Total Cases  | U.S.-born Persons |               | Foreign-born Persons |               | Unknown  |              |
|-----------------------------------------------|--------------|-------------------|---------------|----------------------|---------------|----------|--------------|
|                                               |              | No.               | (%)           | No.                  | (%)           | No.      | (%)          |
| Nashville-Davidson-Murfreesboro--Franklin, TN | 49           | 28                | (57.1)        | 21                   | (42.9)        | 0        | (0.0)        |
| New Haven-Milford, CT                         | 15           | 3                 | (20.0)        | 12                   | (80.0)        | 0        | (0.0)        |
| New Orleans-Metairie, LA                      | 53           | 38                | (71.7)        | 15                   | (28.3)        | 0        | (0.0)        |
| New York-Newark-Jersey City, NY-NJ-PA         | 1,029        | 182               | (17.7)        | 847                  | (82.3)        | 0        | (0.0)        |
| Northport-Sarasota-Bradenton, FL              | 14           | 9                 | (64.3)        | 5                    | (35.7)        | 0        | (0.0)        |
| Ogden-Clearfield, UT                          | 2            | 1                 | (50.0)        | 1                    | (50.0)        | 0        | (0.0)        |
| Oklahoma City, OK                             | 32           | 19                | (59.4)        | 13                   | (40.6)        | 0        | (0.0)        |
| Omaha-Council Bluffs, NE-IA                   | 13           | 5                 | (38.5)        | 8                    | (61.5)        | 0        | (0.0)        |
| Orlando-Kissimmee-Sanford, FL                 | 94           | 45                | (47.9)        | 49                   | (52.1)        | 0        | (0.0)        |
| Oxnard-Thousand Oaks-Ventura, CA              | 35           | 9                 | (25.7)        | 26                   | (74.3)        | 0        | (0.0)        |
| Palm Bay-Melbourne-Titusville, FL             | 12           | 7                 | (58.3)        | 5                    | (41.7)        | 0        | (0.0)        |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD   | 180          | 62                | (34.4)        | 118                  | (65.6)        | 0        | (0.0)        |
| Phoenix-Mesa-Scottsdale, AZ                   | 150          | 38                | (25.3)        | 111                  | (74.0)        | 1        | (0.7)        |
| Pittsburgh, PA                                | 23           | 14                | (60.9)        | 9                    | (39.1)        | 0        | (0.0)        |
| Portland-South Portland, ME                   | 12           | 5                 | (41.7)        | 7                    | (58.3)        | 0        | (0.0)        |
| Portland-Vancouver-Hillsboro, OR-WA           | 49           | 8                 | (16.3)        | 41                   | (83.7)        | 0        | (0.0)        |
| Providence-Warwick, RI-MA                     | 35           | 11                | (31.4)        | 24                   | (68.6)        | 0        | (0.0)        |
| Provo-Orem, UT                                | 3            | 2                 | (66.7)        | 1                    | (33.3)        | 0        | (0.0)        |
| Raleigh, NC                                   | 20           | 6                 | (30.0)        | 14                   | (70.0)        | 0        | (0.0)        |
| Richmond, VA                                  | 24           | 13                | (54.2)        | 11                   | (45.8)        | 0        | (0.0)        |
| Riverside-San Bernardino-Ontario, CA          | 114          | 28                | (24.6)        | 86                   | (75.4)        | 0        | (0.0)        |
| Rochester, NY                                 | 16           | 5                 | (31.3)        | 11                   | (68.8)        | 0        | (0.0)        |
| Sacramento-Roseville--Arden Arcade, CA        | 75           | 16                | (21.3)        | 59                   | (78.7)        | 0        | (0.0)        |
| St. Louis, MO-IL                              | 42           | 19                | (45.2)        | 23                   | (54.8)        | 0        | (0.0)        |
| Salt Lake City, UT                            | 22           | 4                 | (18.2)        | 18                   | (81.8)        | 0        | (0.0)        |
| San Antonio-New Braunfels, TX                 | 79           | 43                | (54.4)        | 36                   | (45.6)        | 0        | (0.0)        |
| San Diego-Carlsbad, CA                        | 234          | 70                | (29.9)        | 164                  | (70.1)        | 0        | (0.0)        |
| San Francisco-Oakland-Hayward, CA             | 382          | 76                | (19.9)        | 306                  | (80.1)        | 0        | (0.0)        |
| San Jose-Sunnyvale-Santa Clara, CA            | 176          | 18                | (10.2)        | 157                  | (89.2)        | 1        | (0.6)        |
| Scranton-Wilkes-Barre-Hazleton, PA            | 6            | 4                 | (66.7)        | 2                    | (33.3)        | 0        | (0.0)        |
| Seattle-Tacoma-Bellevue, WA                   | 145          | 37                | (25.5)        | 108                  | (74.5)        | 0        | (0.0)        |
| Springfield, MA                               | 13           | 2                 | (15.4)        | 11                   | (84.6)        | 0        | (0.0)        |
| Stockton-Lodi, CA                             | 44           | 17                | (38.6)        | 27                   | (61.4)        | 0        | (0.0)        |
| Syracuse, NY                                  | 14           | 7                 | (50.0)        | 7                    | (50.0)        | 0        | (0.0)        |
| Tampa-St. Petersburg-Clearwater, FL           | 77           | 42                | (54.5)        | 35                   | (45.5)        | 0        | (0.0)        |
| Toledo, OH                                    | 8            | 7                 | (87.5)        | 1                    | (12.5)        | 0        | (0.0)        |
| Tucson, AZ                                    | 16           | 6                 | (37.5)        | 10                   | (62.5)        | 0        | (0.0)        |
| Tulsa, OK                                     | 27           | 13                | (48.1)        | 14                   | (51.9)        | 0        | (0.0)        |
| Urban Honolulu, HI                            | 96           | 21                | (21.9)        | 75                   | (78.1)        | 0        | (0.0)        |
| Virginia Beach-Norfolk-Newport News, VA-NC    | 31           | 11                | (35.5)        | 20                   | (64.5)        | 0        | (0.0)        |
| Washington-Arlington-Alexandria, DC-VA-MD-WV  | 321          | 52                | (16.2)        | 269                  | (83.8)        | 0        | (0.0)        |
| Wichita, KS                                   | 8            | 2                 | (25.0)        | 6                    | (75.0)        | 0        | (0.0)        |
| Worcester, MA-CT                              | 11           | 1                 | (9.1)         | 10                   | (90.9)        | 0        | (0.0)        |
| Youngstown-Warren-Boardman, OH-PA             | 4            | 3                 | (75.0)        | 1                    | (25.0)        | 0        | (0.0)        |
| <b>Total - 101 Areas</b>                      | <b>7,829</b> | <b>2,427</b>      | <b>(31.0)</b> | <b>5,397</b>         | <b>(68.9)</b> | <b>5</b> | <b>(0.1)</b> |
| San Juan-Caguas-Guaynabo, PR                  | 56           | 49                | (87.5)        | 7                    | (12.5)        | 0        | (0.0)        |

<sup>1</sup> Includes persons born outside the United States, American Samoa, the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Midway Island, the Commonwealth of the Northern Mariana Islands, Puerto Rico, the Republic of Palau, the U.S. Virgin Islands, and U.S. minor and outlying Pacific islands.

Note: See Technical Notes for definition of MSA.

**Table 67. Tuberculosis Cases and Percentages by Homeless Status,<sup>1</sup> Age ≥15:  
Metropolitan Statistical Areas with ≥500,000 Population, 2012**

| Metropolitan Statistical Area             | Total Cases | Cases with Information on Homeless Status |         | Cases Reported as Being Homeless <sup>2</sup> |        |
|-------------------------------------------|-------------|-------------------------------------------|---------|-----------------------------------------------|--------|
|                                           |             | No.                                       | (%)     | No.                                           | (%)    |
| Akron, OH                                 | 7           | 7                                         | (100.0) | 0                                             | (0.0)  |
| Albany-Schenectady-Troy, NY               | 13          | 13                                        | (100.0) | 0                                             | (0.0)  |
| Albuquerque, NM                           | 10          | 10                                        | (100.0) | 1                                             | (10.0) |
| Allentown-Bethlehem-Easton, PA-NJ         | 6           | 6                                         | (100.0) | 0                                             | (0.0)  |
| Atlanta-Sandy Springs-Roswell, GA         | 194         | 192                                       | (99.0)  | 23                                            | (11.9) |
| Augusta-Richmond County, GA-SC            | 19          | 19                                        | (100.0) | 4                                             | (21.1) |
| Austin-Round Rock, TX                     | 56          | 56                                        | (100.0) | 2                                             | (3.6)  |
| Bakersfield, CA                           | 31          | 30                                        | (96.8)  | 0                                             | (0.0)  |
| Baltimore-Columbia-Towson, MD             | 76          | 75                                        | (98.7)  | 7                                             | (9.2)  |
| Baton Rouge, LA                           | 18          | 17                                        | (94.4)  | 0                                             | (0.0)  |
| Birmingham-Hoover, AL                     | 35          | 35                                        | (100.0) | 0                                             | (0.0)  |
| Boise City, ID                            | 5           | 5                                         | (100.0) | 0                                             | (0.0)  |
| Boston-Cambridge-Newton, MA-NH            | 173         | 172                                       | (99.4)  | 5                                             | (2.9)  |
| Bridgeport-Stamford-Norwalk, CT           | 31          | 31                                        | (100.0) | 0                                             | (0.0)  |
| Buffalo-Cheektowaga-Niagara Falls, NY     | 20          | 20                                        | (100.0) | 0                                             | (0.0)  |
| Cape Coral-Fort Myers, FL                 | 23          | 23                                        | (100.0) | 1                                             | (4.3)  |
| Charleston-North Charleston, SC           | 28          | 28                                        | (100.0) | 2                                             | (7.1)  |
| Charlotte-Concord-Gastonia, NC-SC         | 53          | 53                                        | (100.0) | 3                                             | (5.7)  |
| Chattanooga, TN-GA                        | 11          | 11                                        | (100.0) | 0                                             | (0.0)  |
| Chicago-Naperville-Elgin, IL-IN-WI        | 296         | 295                                       | (99.7)  | 19                                            | (6.4)  |
| Cincinnati, OH-KY-IN                      | 30          | 30                                        | (100.0) | 5                                             | (16.7) |
| Cleveland-Elyria, OH                      | 34          | 34                                        | (100.0) | 4                                             | (11.8) |
| Colorado Springs, CO                      | 6           | 6                                         | (100.0) | 1                                             | (16.7) |
| Columbia, SC                              | 12          | 12                                        | (100.0) | 0                                             | (0.0)  |
| Columbus, OH                              | 42          | 42                                        | (100.0) | 2                                             | (4.8)  |
| Dallas-Fort Worth-Arlington, TX           | 284         | 284                                       | (100.0) | 38                                            | (13.4) |
| Dayton, OH                                | 8           | 8                                         | (100.0) | 0                                             | (0.0)  |
| Denver-Aurora-Lakewood, CO                | 29          | 29                                        | (100.0) | 2                                             | (6.9)  |
| Des Moines-West Des Moines, IA            | 12          | 12                                        | (100.0) | 0                                             | (0.0)  |
| Detroit-Warren-Dearborn, MI               | 94          | 92                                        | (97.9)  | 4                                             | (4.3)  |
| Durham-Chapel Hill, NC                    | 14          | 14                                        | (100.0) | 1                                             | (7.1)  |
| El Paso, TX                               | 36          | 36                                        | (100.0) | 1                                             | (2.8)  |
| Fresno, CA                                | 35          | 35                                        | (100.0) | 5                                             | (14.3) |
| Grand Rapids-Wyoming, MI                  | 17          | 17                                        | (100.0) | 1                                             | (5.9)  |
| Greensboro-High Point, NC                 | 19          | 19                                        | (100.0) | 0                                             | (0.0)  |
| Greenville-Anderson-Mauldin, SC           | 9           | 9                                         | (100.0) | 1                                             | (11.1) |
| Harrisburg-Carlisle, PA                   | 13          | 13                                        | (100.0) | 1                                             | (7.7)  |
| Hartford-West Hartford-East Hartford, CT  | 23          | 23                                        | (100.0) | 1                                             | (4.3)  |
| Houston-The Woodlands-Sugar Land, TX      | 324         | 324                                       | (100.0) | 10                                            | (3.1)  |
| Indianapolis-Carmel-Anderson, IN          | 41          | 40                                        | (97.6)  | 7                                             | (17.1) |
| Jackson, MS                               | 30          | 30                                        | (100.0) | 3                                             | (10.0) |
| Jacksonville, FL                          | 95          | 95                                        | (100.0) | 24                                            | (25.3) |
| Kansas City, MO-KS                        | 33          | 31                                        | (93.9)  | 5                                             | (15.2) |
| Knoxville, TN                             | 13          | 13                                        | (100.0) | 0                                             | (0.0)  |
| Lakeland-Winter Haven, FL                 | 15          | 15                                        | (100.0) | 2                                             | (13.3) |
| Lancaster, PA                             | 6           | 6                                         | (100.0) | 0                                             | (0.0)  |
| Las Vegas-Henderson-Paradise, NV          | 58          | 58                                        | (100.0) | 1                                             | (1.7)  |
| Little Rock-North Little Rock-Conway, AR  | 10          | 10                                        | (100.0) | 2                                             | (20.0) |
| Los Angeles-Long Beach-Anaheim, CA        | 840         | 836                                       | (99.5)  | 46                                            | (5.5)  |
| Louisville/Jefferson County, KY-IN        | 29          | 29                                        | (100.0) | 3                                             | (10.3) |
| Madison, WI                               | 11          | 11                                        | (100.0) | 0                                             | (0.0)  |
| McAllen-Edinburg-Mission, TX              | 69          | 69                                        | (100.0) | 1                                             | (1.4)  |
| Memphis, TN-MS-AR                         | 57          | 57                                        | (100.0) | 3                                             | (5.3)  |
| Miami-Fort Lauderdale-West Palm Beach, FL | 218         | 212                                       | (97.2)  | 21                                            | (9.6)  |
| Milwaukee-Waukesha-West Allis, WI         | 28          | 28                                        | (100.0) | 0                                             | (0.0)  |
| Minneapolis-St. Paul-Bloomington, MN-WI   | 121         | 121                                       | (100.0) | 2                                             | (1.7)  |
| Modesto, CA                               | 7           | 7                                         | (100.0) | 0                                             | (0.0)  |

**Table 67. (Cont'd) Tuberculosis Cases and Percentages by Homeless Status,<sup>1</sup> Age  $\geq 15$ :  
Metropolitan Statistical Areas with  $\geq 500,000$  Population, 2012**

| Metropolitan Statistical Area                 | Total Cases  | Cases with Information on Homeless Status |               | Cases Reported as Being Homeless <sup>2</sup> |              |
|-----------------------------------------------|--------------|-------------------------------------------|---------------|-----------------------------------------------|--------------|
|                                               |              | No.                                       | (%)           | No.                                           | (%)          |
| Nashville-Davidson-Murfreesboro--Franklin, TN | 48           | 48                                        | (100.0)       | 4                                             | (8.3)        |
| New Haven-Milford, CT                         | 15           | 15                                        | (100.0)       | 1                                             | (6.7)        |
| New Orleans-Metairie, LA                      | 52           | 50                                        | (96.2)        | 4                                             | (7.7)        |
| New York-Newark-Jersey City, NY-NJ-PA         | 1,003        | 989                                       | (98.6)        | 22                                            | (2.2)        |
| Northport-Sarasota-Bradenton, FL              | 13           | 13                                        | (100.0)       | 1                                             | (7.7)        |
| Ogden-Clearfield, UT                          | 2            | 2                                         | (100.0)       | 0                                             | (0.0)        |
| Oklahoma City, OK                             | 31           | 30                                        | (96.8)        | 1                                             | (3.2)        |
| Omaha-Council Bluffs, NE-IA                   | 13           | 13                                        | (100.0)       | 2                                             | (15.4)       |
| Orlando-Kissimmee-Sanford, FL                 | 91           | 91                                        | (100.0)       | 4                                             | (4.4)        |
| Oxnard-Thousand Oaks-Ventura, CA              | 29           | 29                                        | (100.0)       | 1                                             | (3.4)        |
| Palm Bay-Melbourne-Titusville, FL             | 10           | 10                                        | (100.0)       | 0                                             | (0.0)        |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD   | 177          | 177                                       | (100.0)       | 5                                             | (2.8)        |
| Phoenix-Mesa-Scottsdale, AZ                   | 144          | 122                                       | (84.7)        | 9                                             | (6.3)        |
| Pittsburgh, PA                                | 23           | 22                                        | (95.7)        | 0                                             | (0.0)        |
| Portland-South Portland, ME                   | 11           | 11                                        | (100.0)       | 1                                             | (9.1)        |
| Portland-Vancouver-Hillsboro, OR-WA           | 48           | 48                                        | (100.0)       | 2                                             | (4.2)        |
| Providence-Warwick, RI-MA                     | 33           | 33                                        | (100.0)       | 0                                             | (0.0)        |
| Provo-Orem, UT                                | 3            | 3                                         | (100.0)       | 0                                             | (0.0)        |
| Raleigh, NC                                   | 17           | 17                                        | (100.0)       | 0                                             | (0.0)        |
| Richmond, VA                                  | 21           | 21                                        | (100.0)       | 1                                             | (4.8)        |
| Riverside-San Bernardino-Ontario, CA          | 110          | 110                                       | (100.0)       | 3                                             | (2.7)        |
| Rochester, NY                                 | 14           | 14                                        | (100.0)       | 0                                             | (0.0)        |
| Sacramento--Roseville--Arden Arcade, CA       | 73           | 71                                        | (97.3)        | 6                                             | (8.2)        |
| St. Louis, MO-IL                              | 42           | 42                                        | (100.0)       | 1                                             | (2.4)        |
| Salt Lake City, UT                            | 21           | 21                                        | (100.0)       | 1                                             | (4.8)        |
| San Antonio-New Braunfels, TX                 | 73           | 73                                        | (100.0)       | 2                                             | (2.7)        |
| San Diego-Carlsbad, CA                        | 223          | 223                                       | (100.0)       | 28                                            | (12.6)       |
| San Francisco-Oakland-Hayward, CA             | 372          | 370                                       | (99.5)        | 17                                            | (4.6)        |
| San Jose-Sunnyvale-Santa Clara, CA            | 170          | 168                                       | (98.8)        | 4                                             | (2.4)        |
| Scranton-Wilkes-Barre-Hazleton, PA            | 6            | 6                                         | (100.0)       | 0                                             | (0.0)        |
| Seattle-Tacoma-Bellevue, WA                   | 135          | 134                                       | (99.3)        | 4                                             | (3.0)        |
| Springfield, MA                               | 13           | 13                                        | (100.0)       | 1                                             | (7.7)        |
| Stockton-Lodi, CA                             | 39           | 38                                        | (97.4)        | 3                                             | (7.7)        |
| Syracuse, NY                                  | 12           | 12                                        | (100.0)       | 0                                             | (0.0)        |
| Tampa-St. Petersburg-Clearwater, FL           | 75           | 75                                        | (100.0)       | 8                                             | (10.7)       |
| Toledo, OH                                    | 8            | 8                                         | (100.0)       | 0                                             | (0.0)        |
| Tucson, AZ                                    | 14           | 14                                        | (100.0)       | 0                                             | (0.0)        |
| Tulsa, OK                                     | 18           | 16                                        | (88.9)        | 3                                             | (16.7)       |
| Urban Honolulu, HI                            | 94           | 90                                        | (95.7)        | 3                                             | (3.2)        |
| Virginia Beach-Norfolk-Newport News, VA-NC    | 29           | 28                                        | (96.6)        | 1                                             | (3.4)        |
| Washington-Arlington-Alexandria, DC-VA-MD-WV  | 303          | 302                                       | (99.7)        | 11                                            | (3.6)        |
| Wichita, KS                                   | 8            | 8                                         | (100.0)       | 0                                             | (0.0)        |
| Worcester, MA-CT                              | 11           | 11                                        | (100.0)       | 0                                             | (0.0)        |
| Youngstown-Warren-Boardman, OH-PA             | 4            | 4                                         | (100.0)       | 0                                             | (0.0)        |
| <b>Total - 101 Areas</b>                      | <b>7,478</b> | <b>7,400</b>                              | <b>(99.0)</b> | <b>418</b>                                    | <b>(5.6)</b> |
| San Juan-Caguas-Guaynabo, PR                  | 56           | 56                                        | (100.0)       | 2                                             | (3.6)        |

<sup>1</sup> Homeless within past 12 months of TB diagnosis.

<sup>2</sup> Percent of those with known status.

**Note:** See Technical Notes for definition of MSA.

**This page intentionally left blank**

# **Surveillance Slide Set**

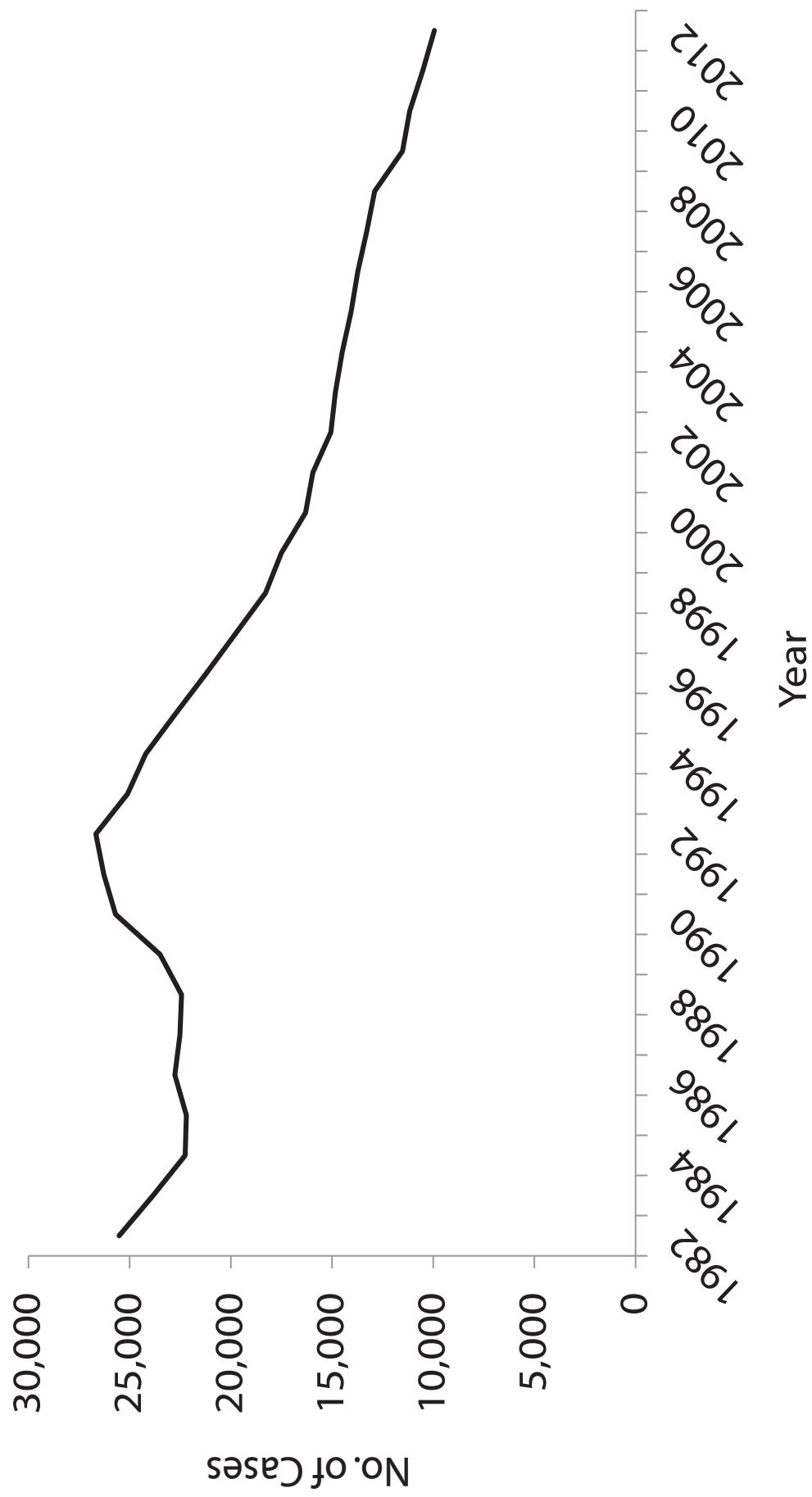
## **2012**



# Tuberculosis in the United States

**National Tuberculosis Surveillance System  
Highlights from 2012**

## Reported TB Cases United States, 1982–2012\*



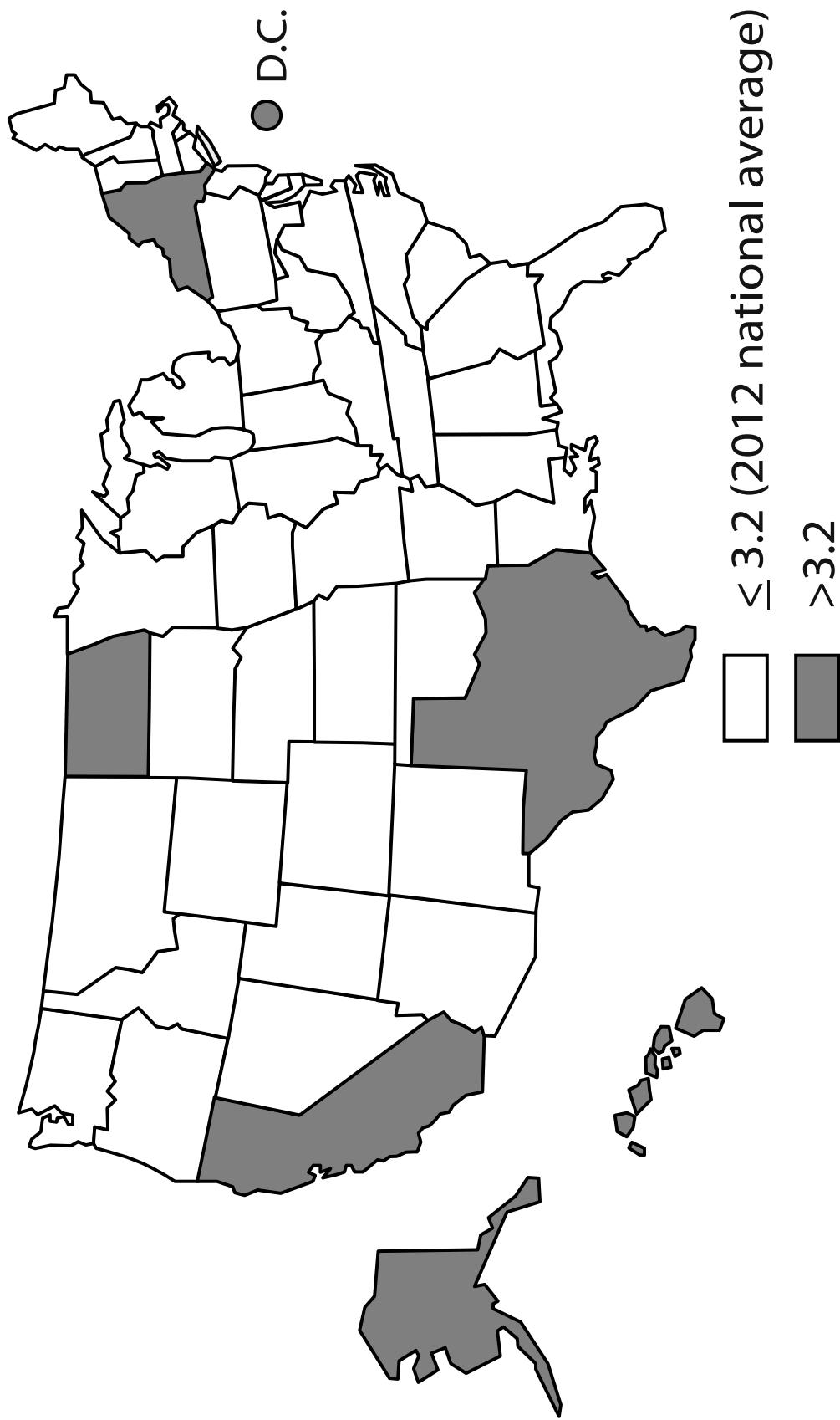
\*Updated as of June 10, 2013.

# TB Morbidity United States, 2007–2012

| Year | No.    | Rate* |
|------|--------|-------|
| 2007 | 13,282 | 4.4   |
| 2008 | 12,895 | 4.2   |
| 2009 | 11,520 | 3.8   |
| 2010 | 11,163 | 3.6   |
| 2011 | 10,517 | 3.4   |
| 2012 | 9,945  | 3.2   |

\*Cases per 100,000. Updated as of June 10, 2013.

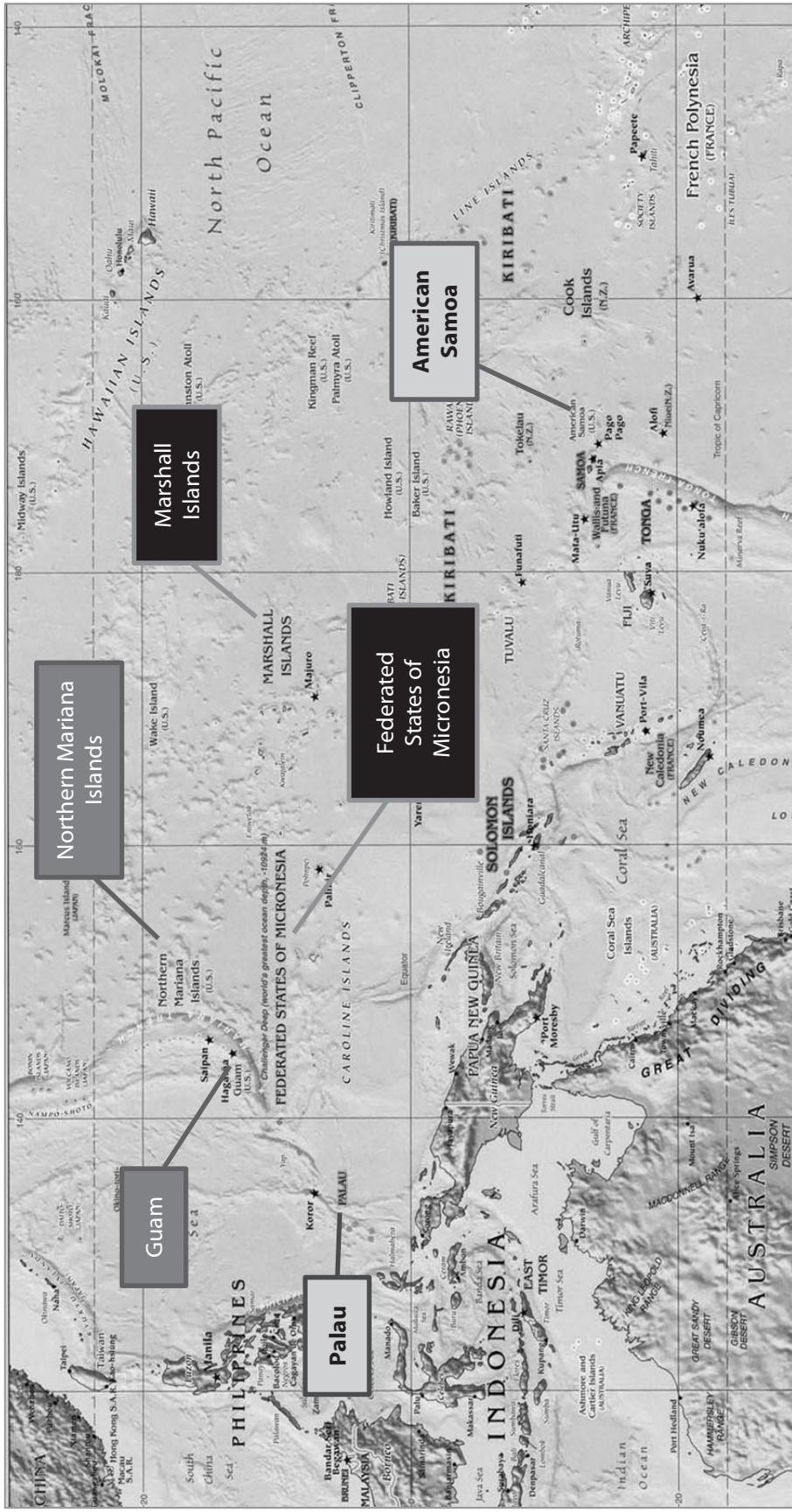
## TB Case Rates,\* United States, 2012



\*Cases per 100,000.

# Surveillance Slide #5

## Map of U.S.-Affiliated Pacific Islands by TB Case Rates,\* 2012



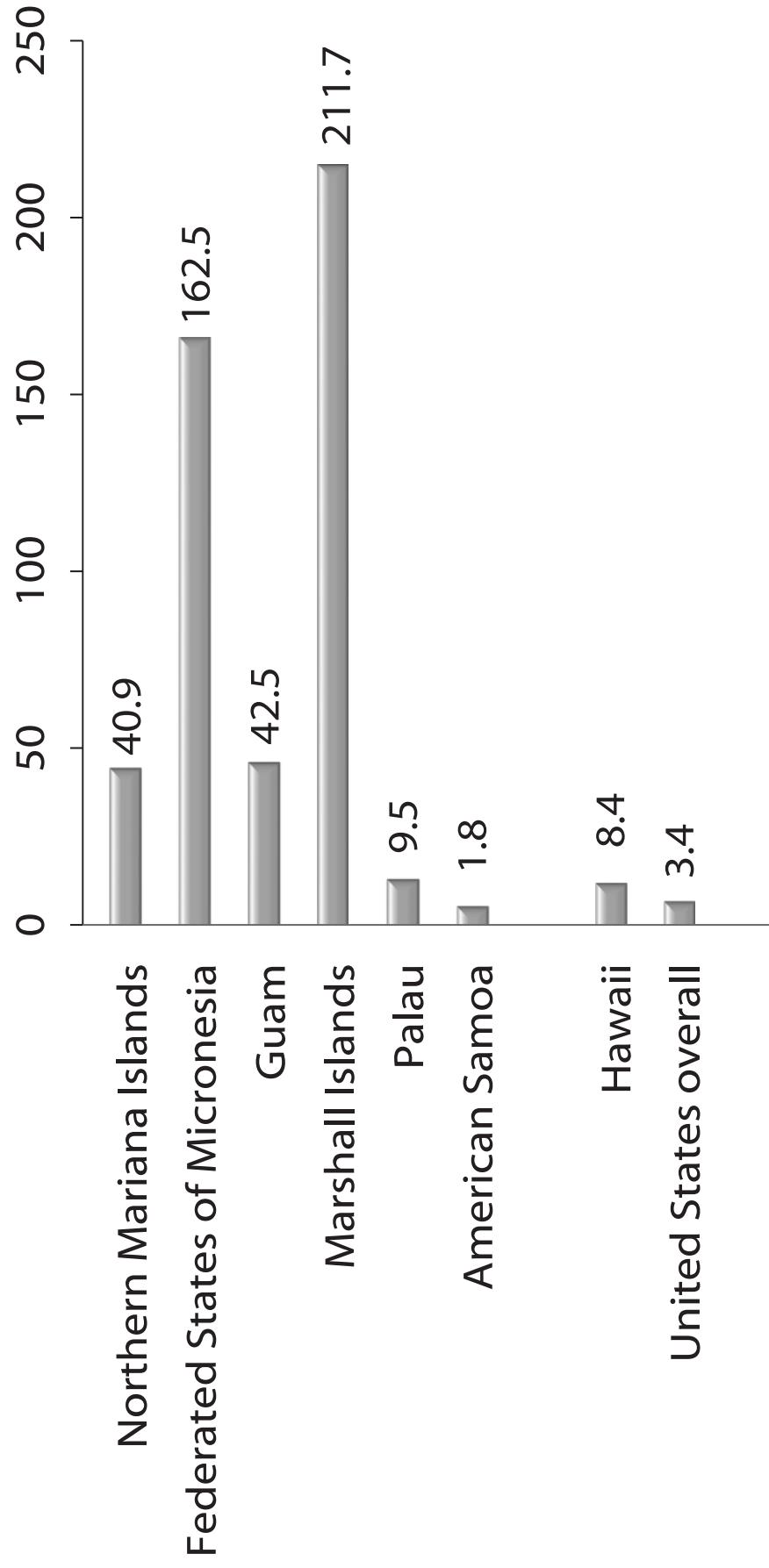
≥50

10–49.9

≤9.9

\*Case rate for 1,000,000

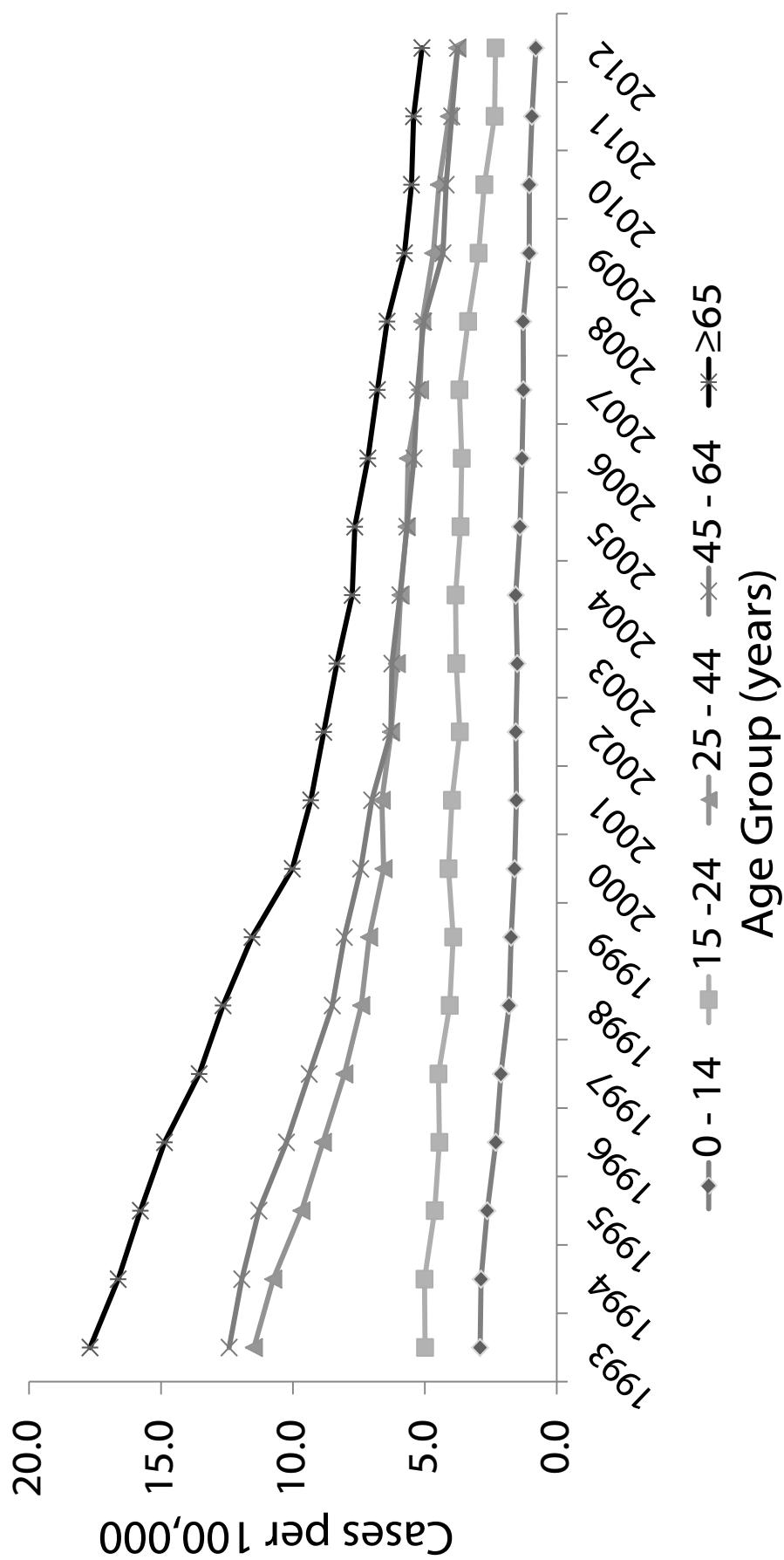
## TB Case Rates,\* U.S.-Affiliated Pacific Islands, 2012



\*Cases per 100,000

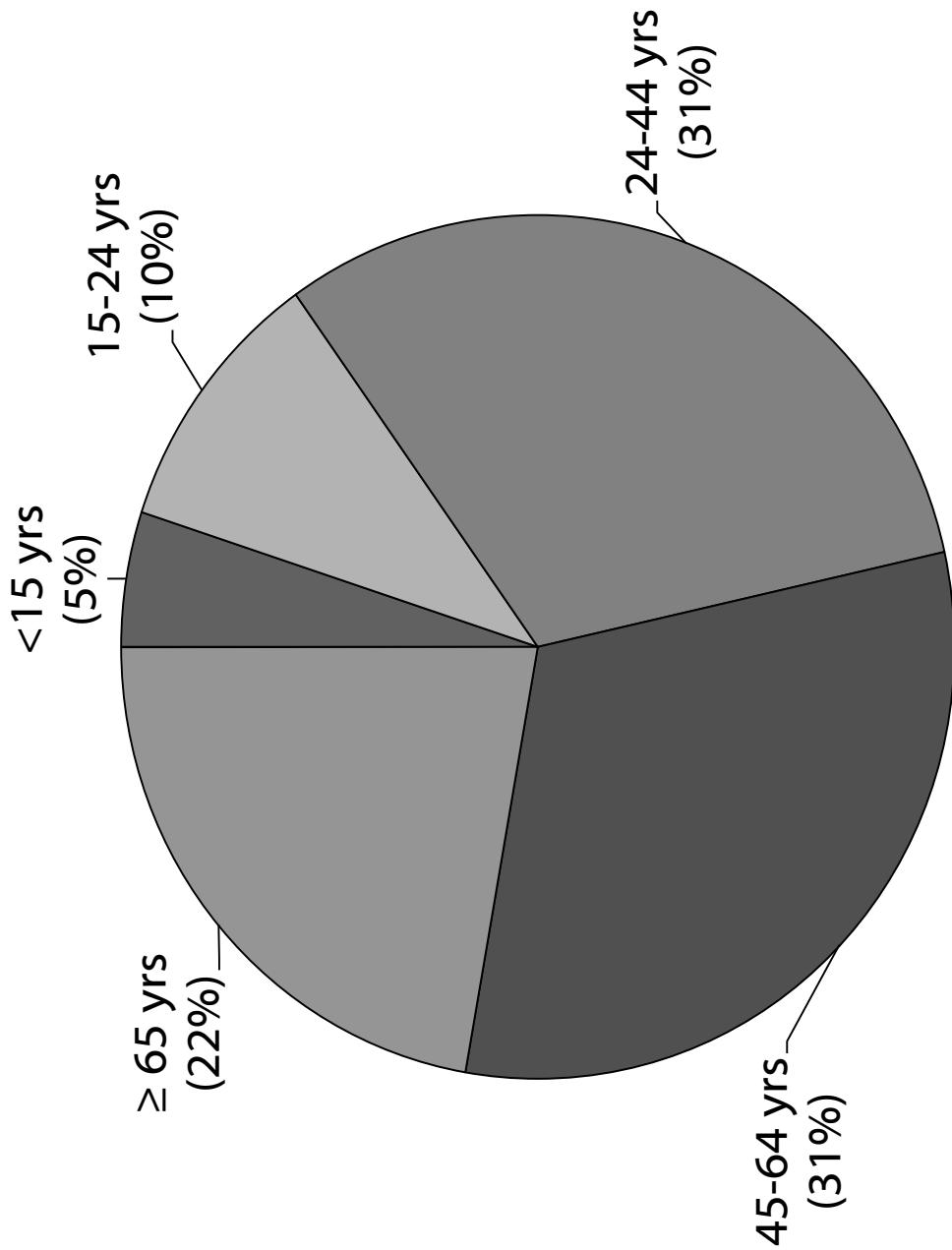
Surveillance Slide #7

## TB Case Rates\* by Age Group United States, 1993–2012

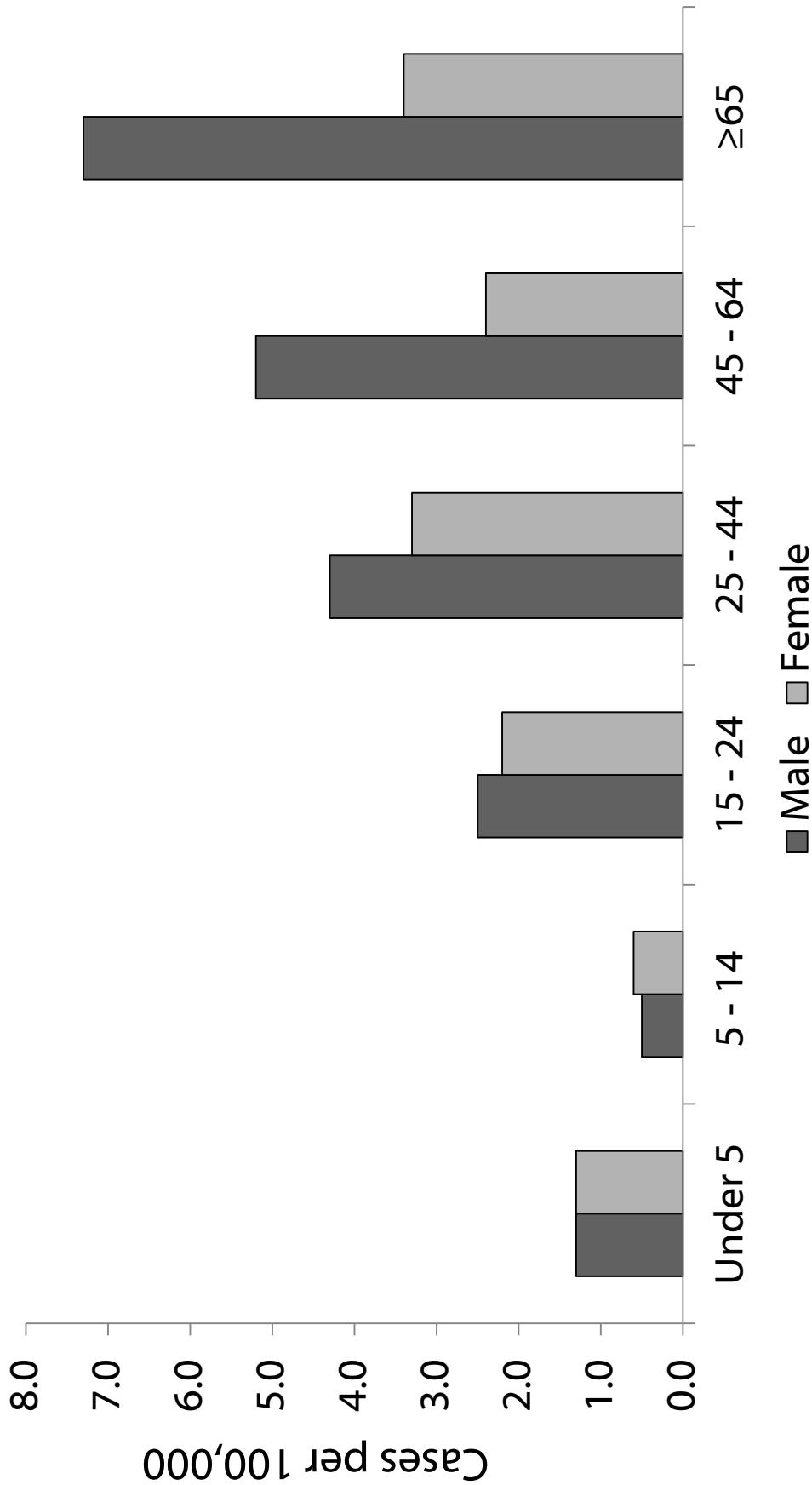


\* Updated as of June 10, 2013.

## Reported TB Cases by Age Group, United States, 2011

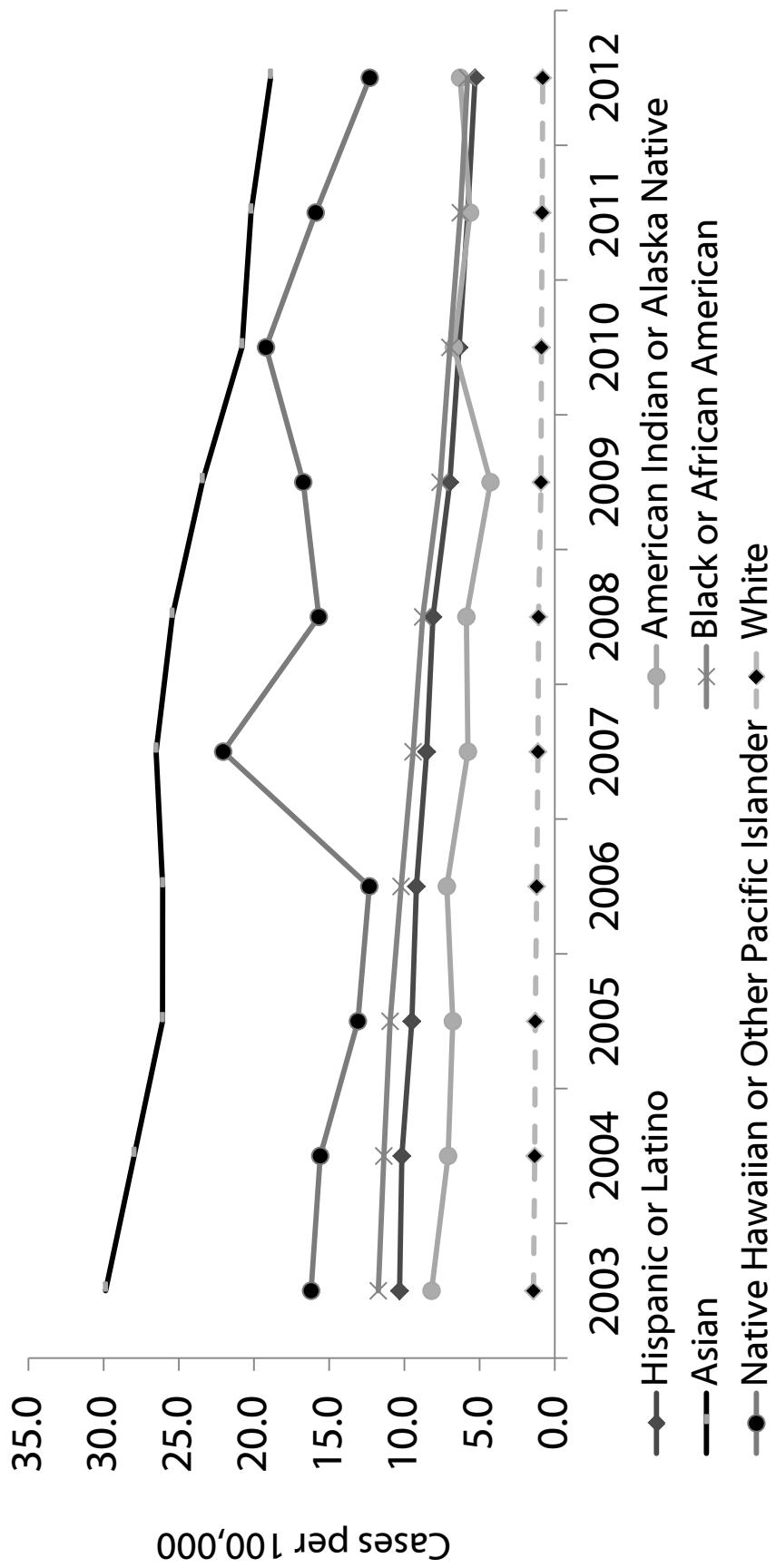


## TB Case Rates by Age Group and Sex, United States, 2012



Surveillance Slide #10

# TB Case Rates by Race/Ethnicity, United States, 2003–2012\*\*

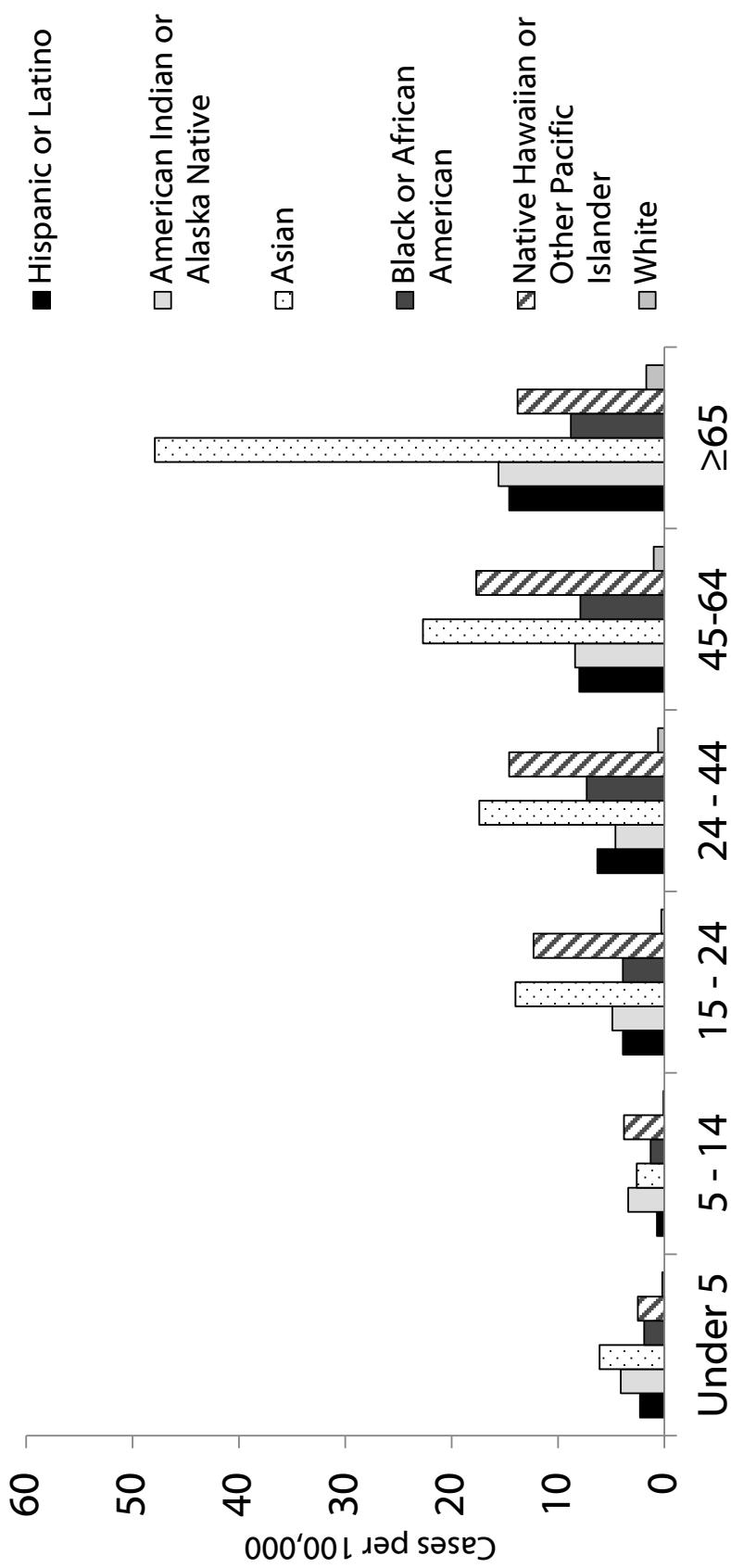


\*All races are non-Hispanic.

\*\*Updated as of June 10, 2013.

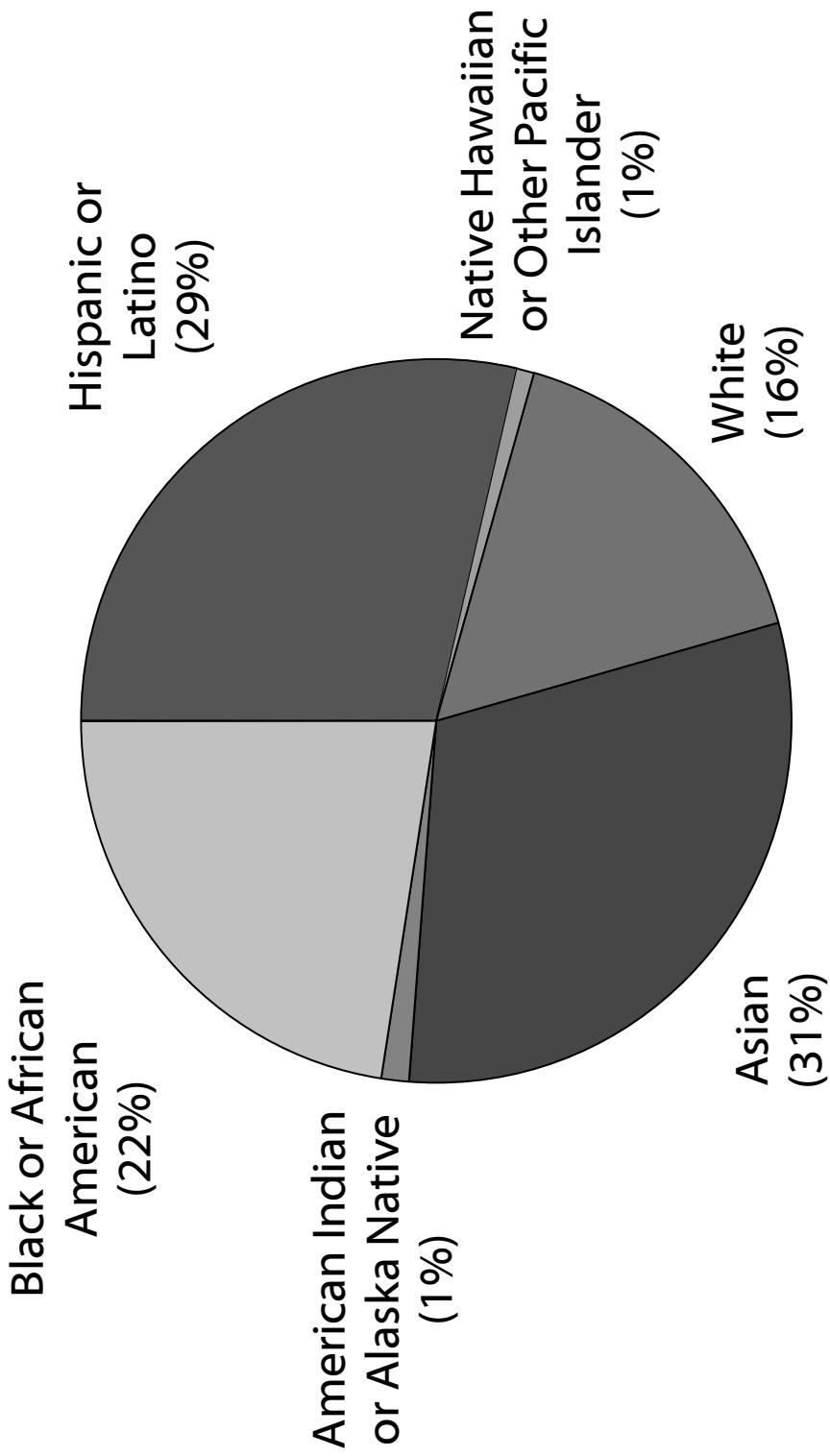
# Surveillance Slide #11

## TB Case Rates by Age Group and Race/Ethnicity,\* United States, 2012



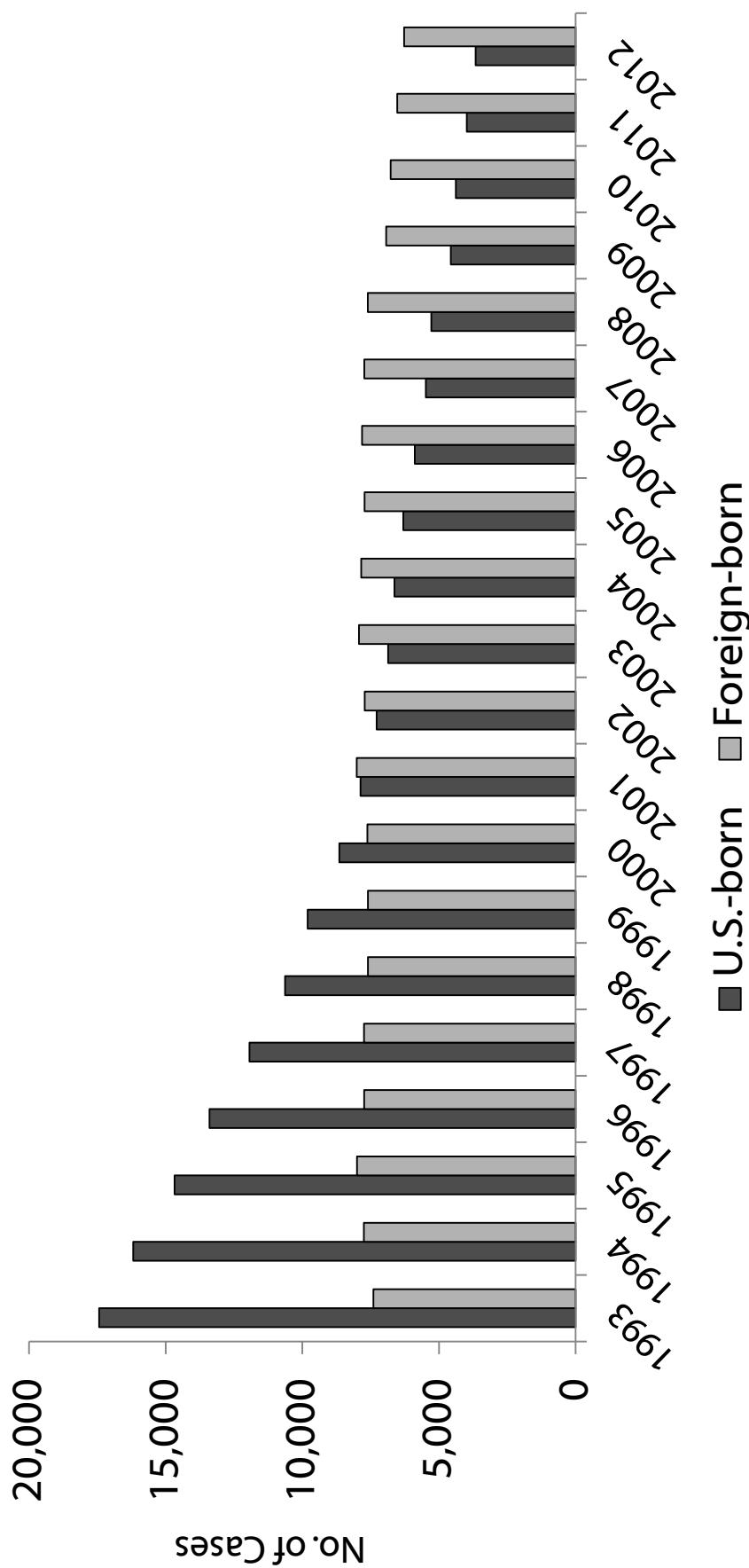
\*All races are non-Hispanic. Persons reporting two or more races accounted for less than 1% of all cases.

## Reported TB Cases by Race/Ethnicity,\* United States, 2012



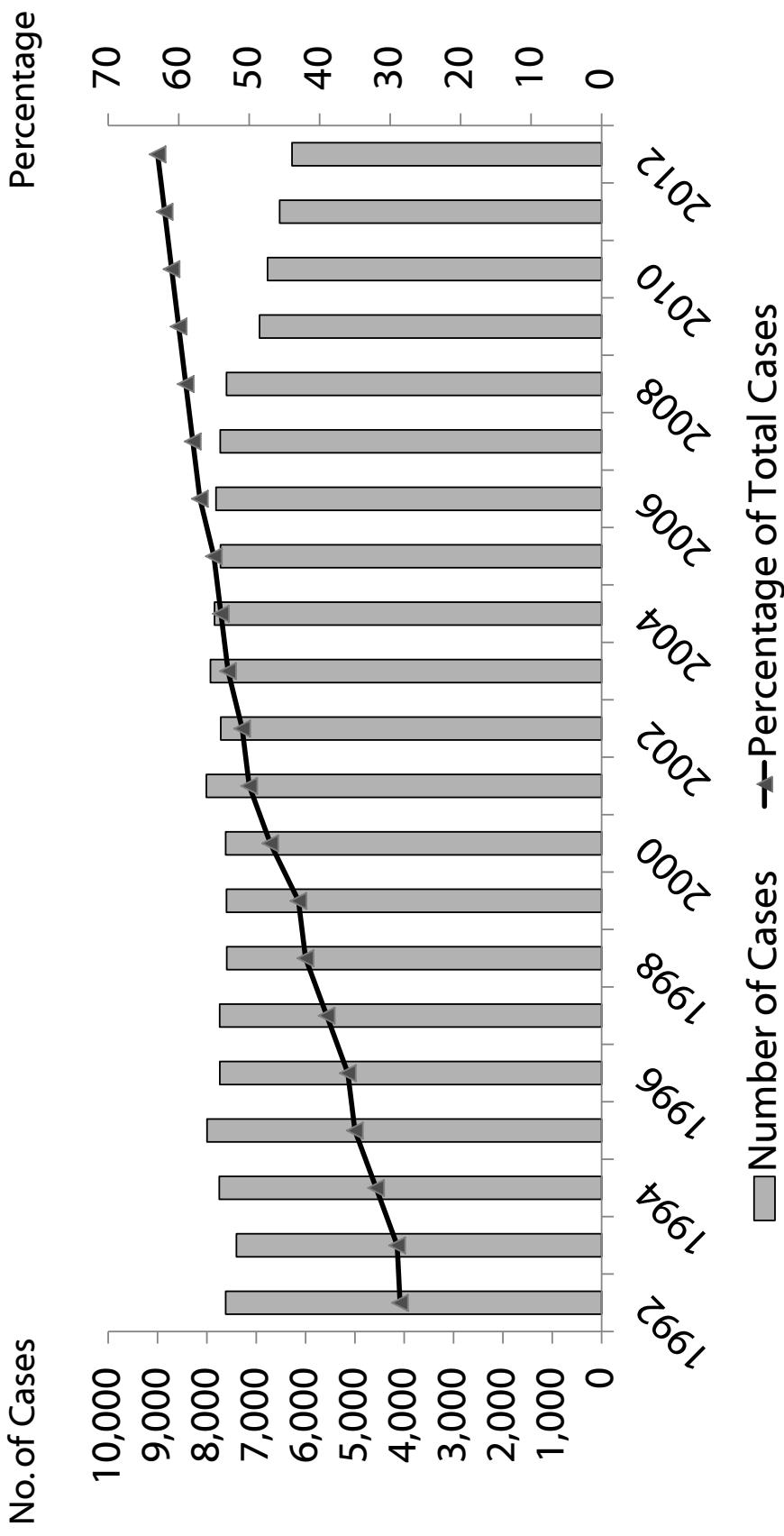
\*All races are non-Hispanic. Persons reporting two or more races accounted for less than 1% of all cases.

## Number of TB Cases in U.S.-born vs. Foreign-born Persons, United States, 1993–2012\*



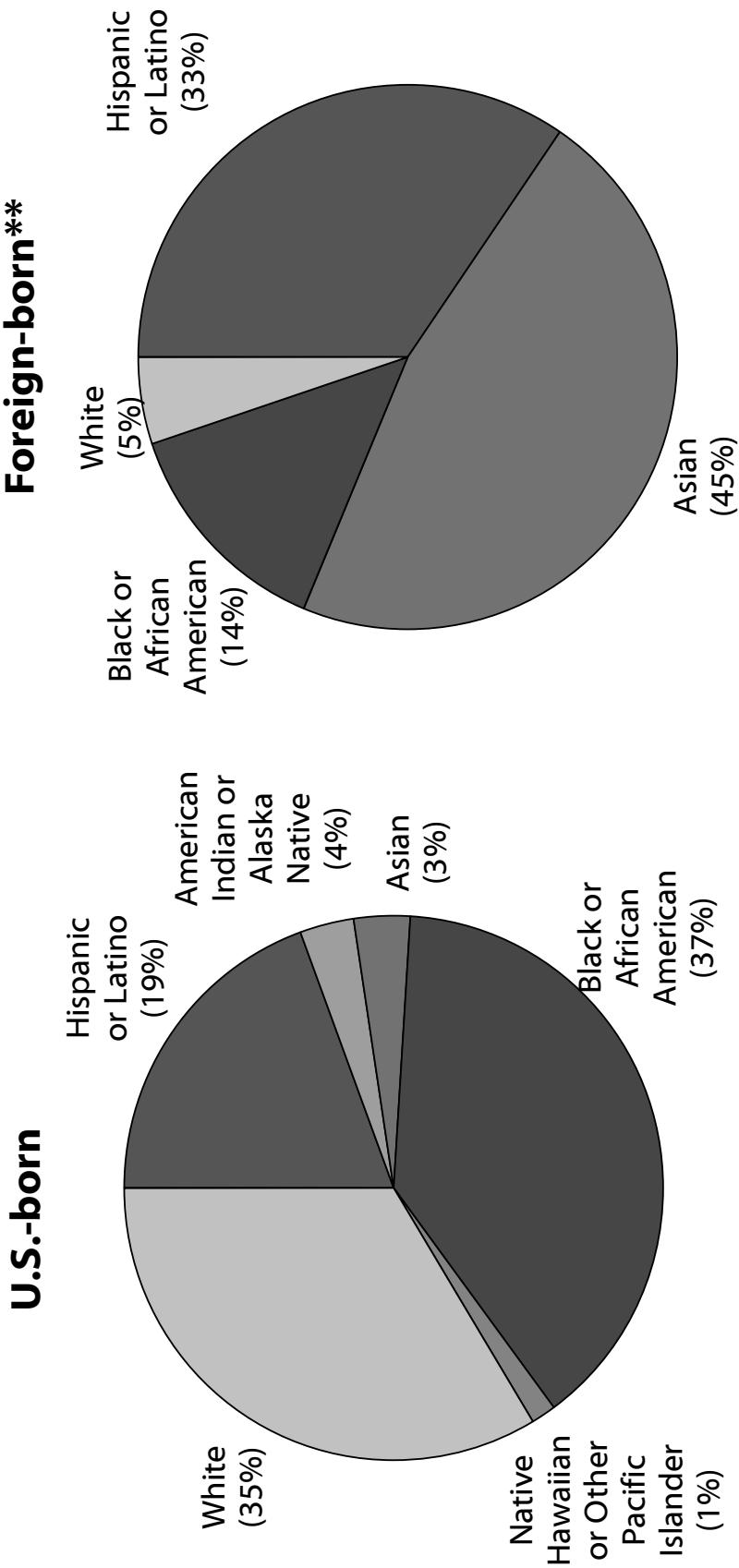
\*Updated as of June 10, 2013

## Trends in TB Cases in Foreign-born Persons, United States, 1992 - 2012\*



\*Updated as of June 10, 2013

## Reported TB Cases by Origin and Race/Ethnicity,\* United States, 2012

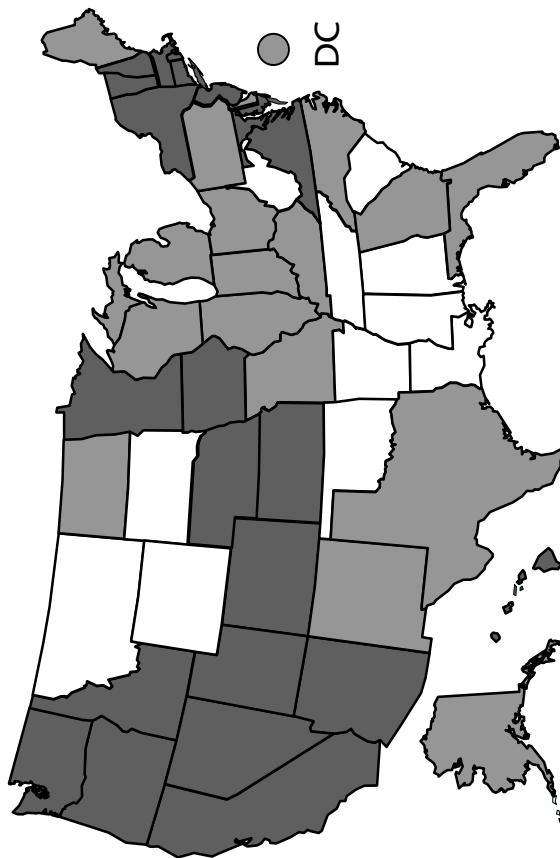


\*All races are non-Hispanic. Persons reporting two or more races accounted for less than 1% of all cases.

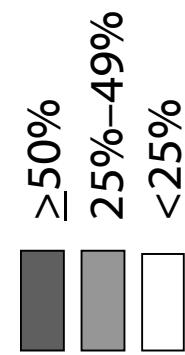
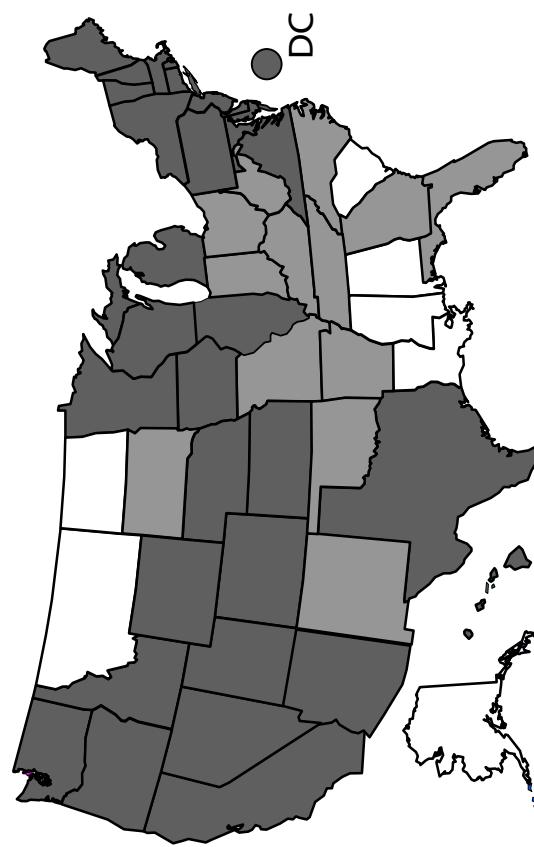
\*\* American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander accounted for less than 1% of foreign-born cases and are not shown.

## Percentage of TB Cases Among Foreign-born Persons, United States\*

2002

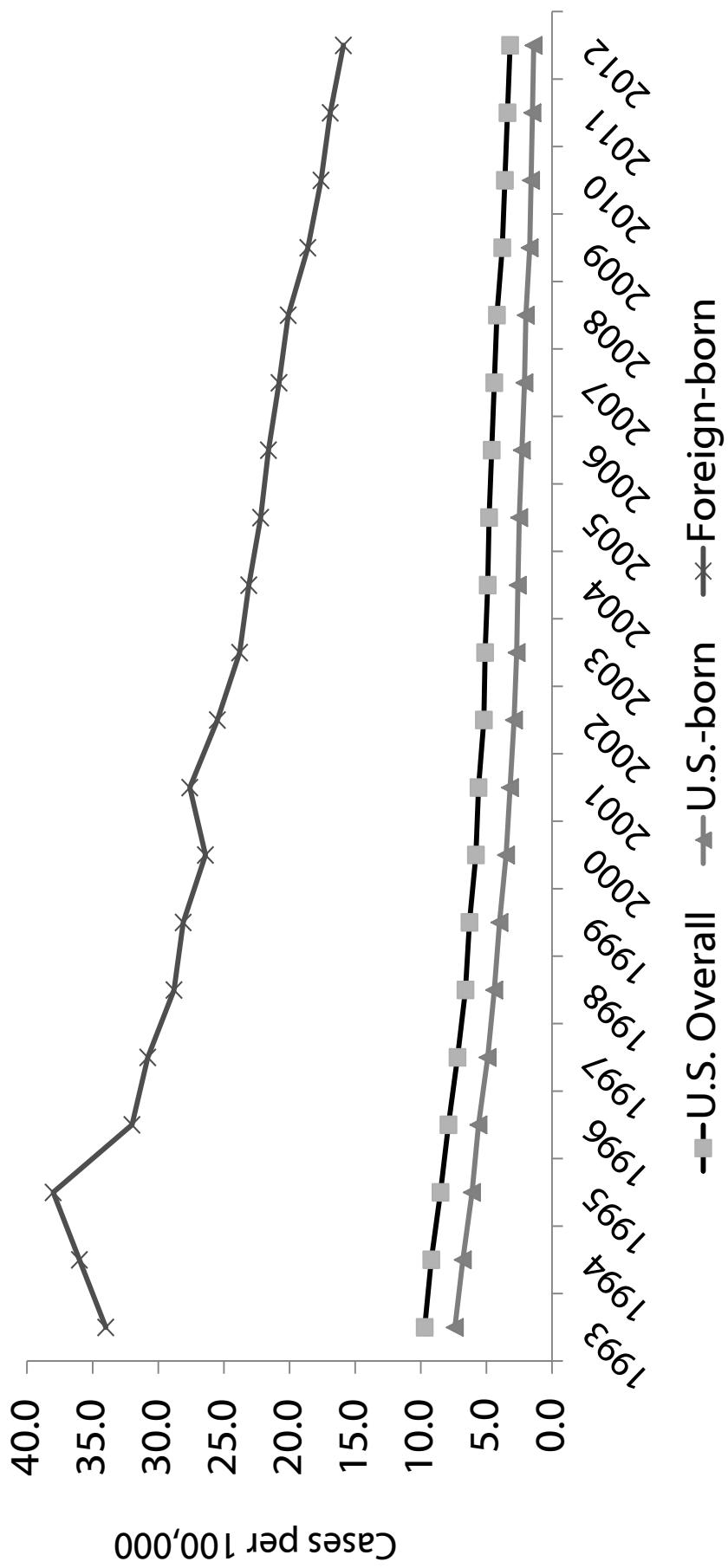


2012



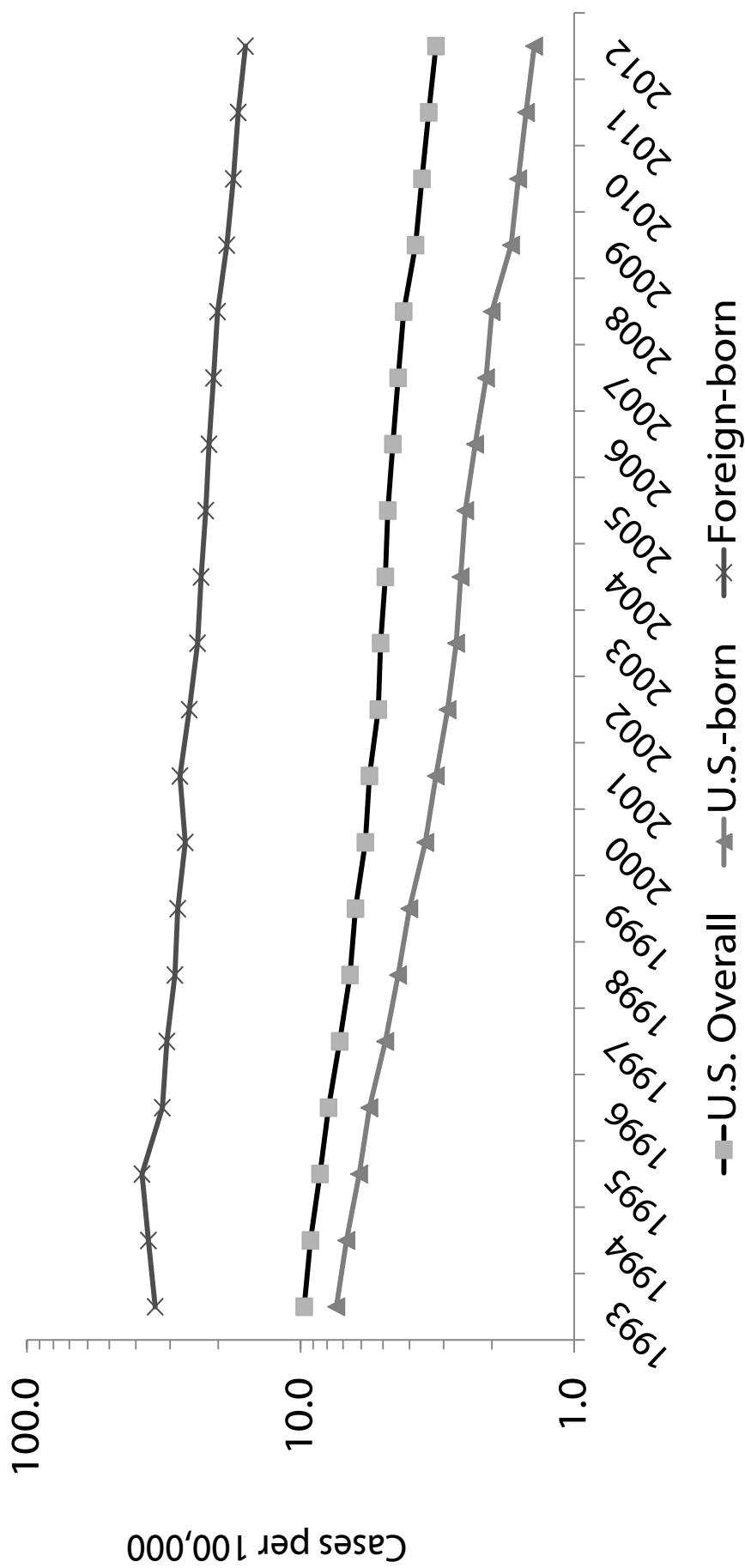
\*Updated as of June 10, 2013.

## TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993 – 2012\*



\*Updated as of June 10, 2013.

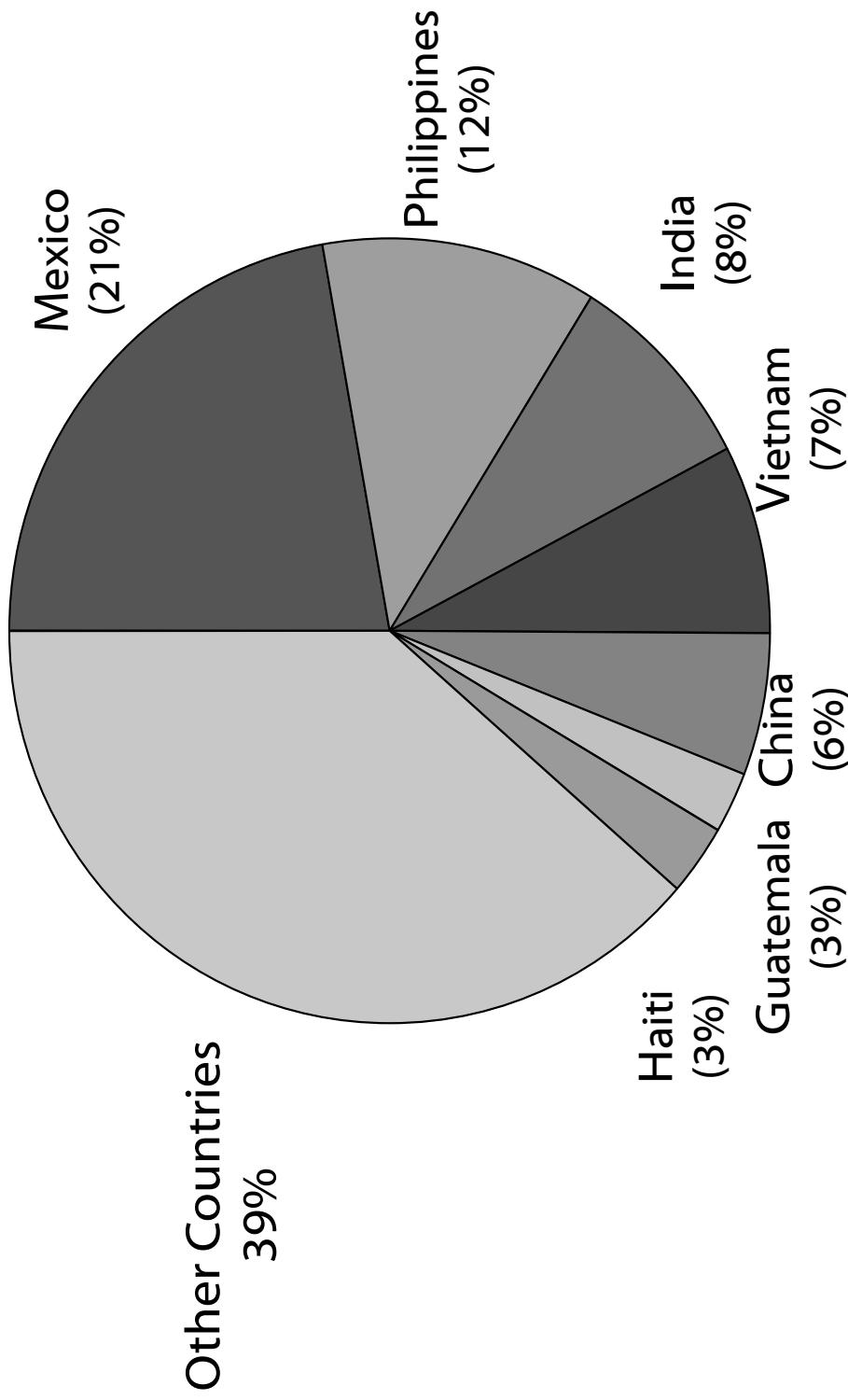
## TB Case Rates in U.S.-born vs. Foreign-born Persons, United States,\* 1993 - 2012\*\*



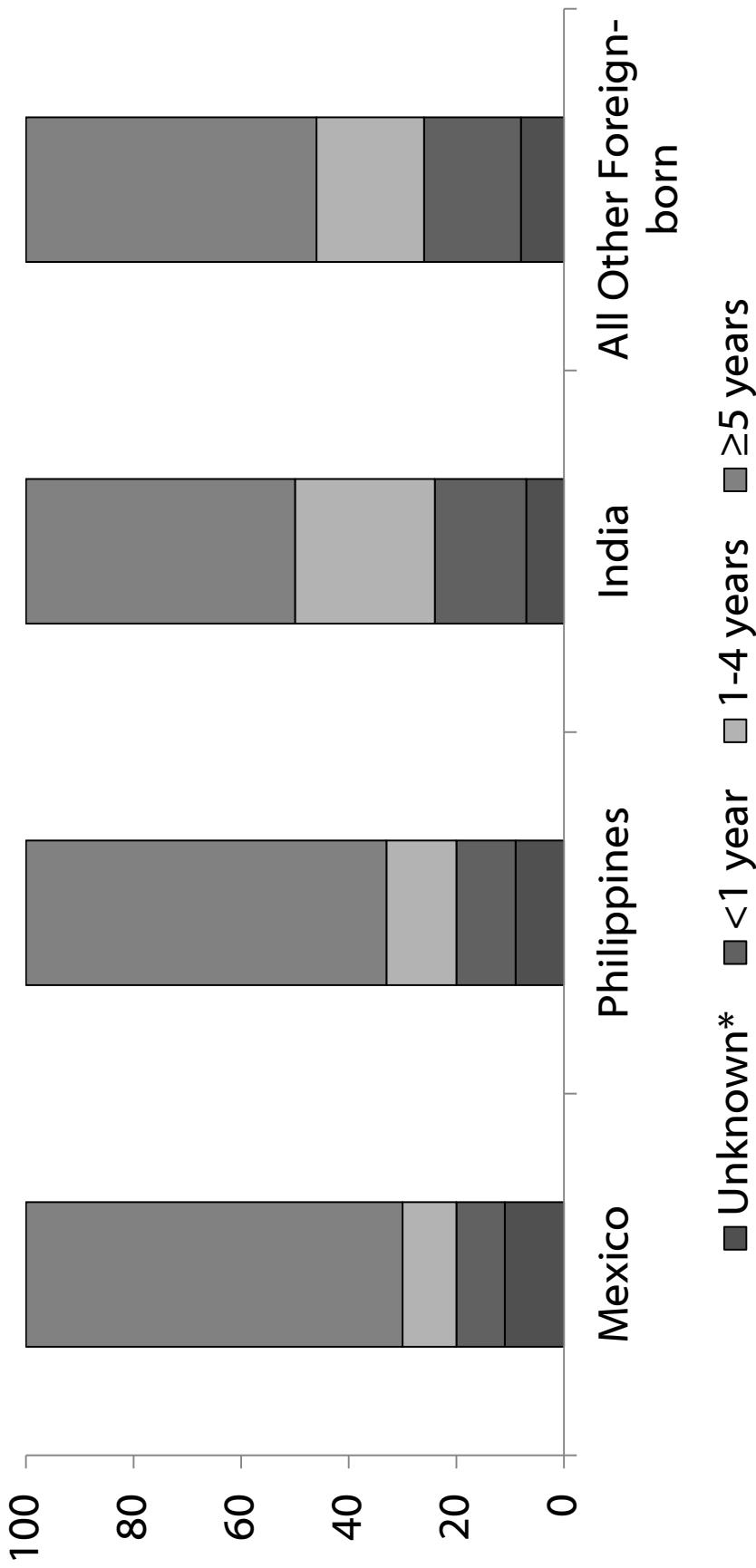
\*Includes the same data as slide 15, but rates presented on a logarithmic scale.

\*\*Updated as of June 10, 2013.

## **Countries of Birth of Foreign-born Persons Reported with TB, United States, 2012**

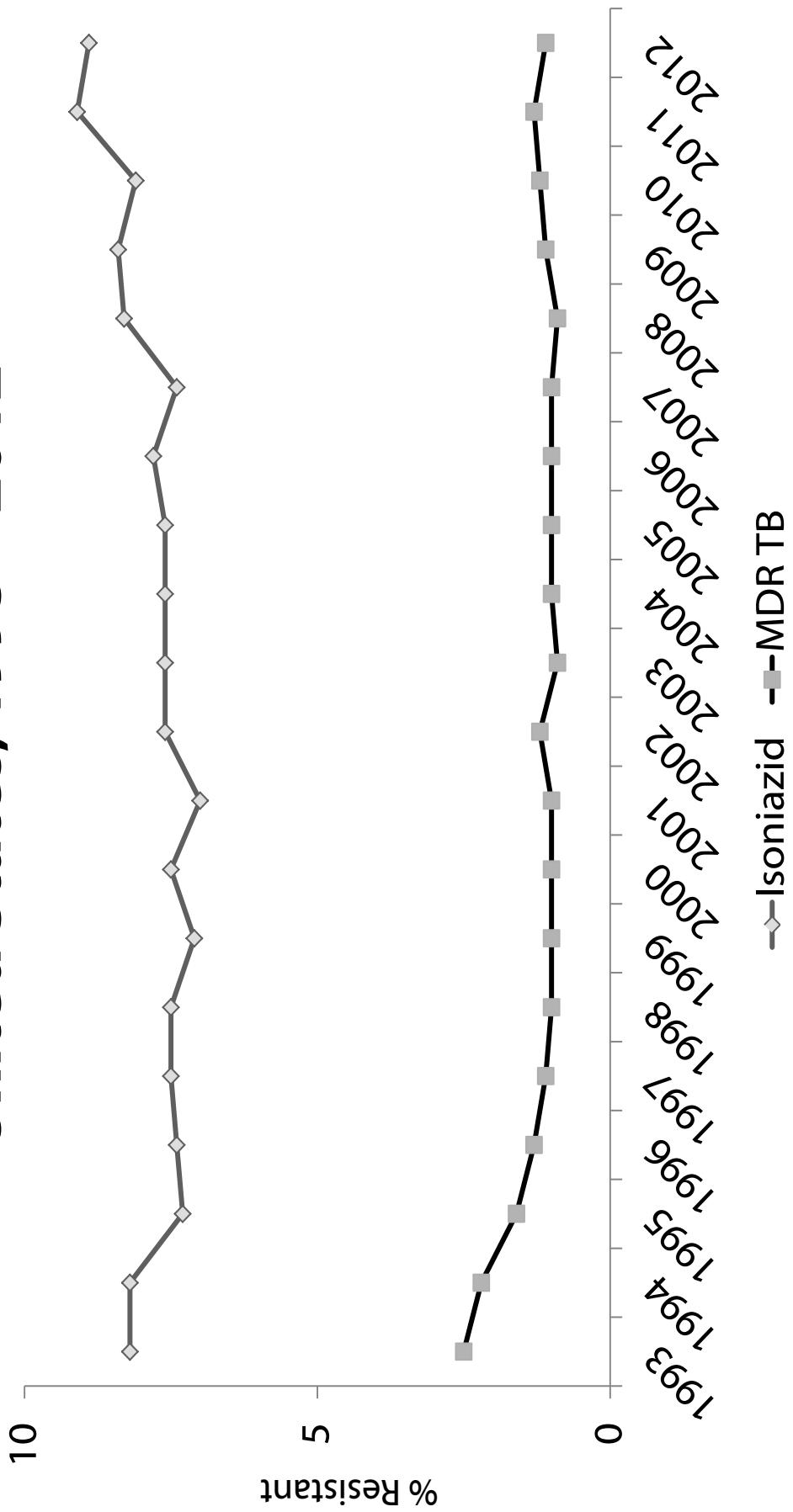


## Percent of Foreign-born with TB by Time of Residence in U.S. Prior to Diagnosis, 2012



\*Foreign-born TB patients for whom information on length of residence in the U.S. prior to diagnosis is unknown or missing

## Primary Anti-TB Drug Resistance, United States, 1993 – 2012\*

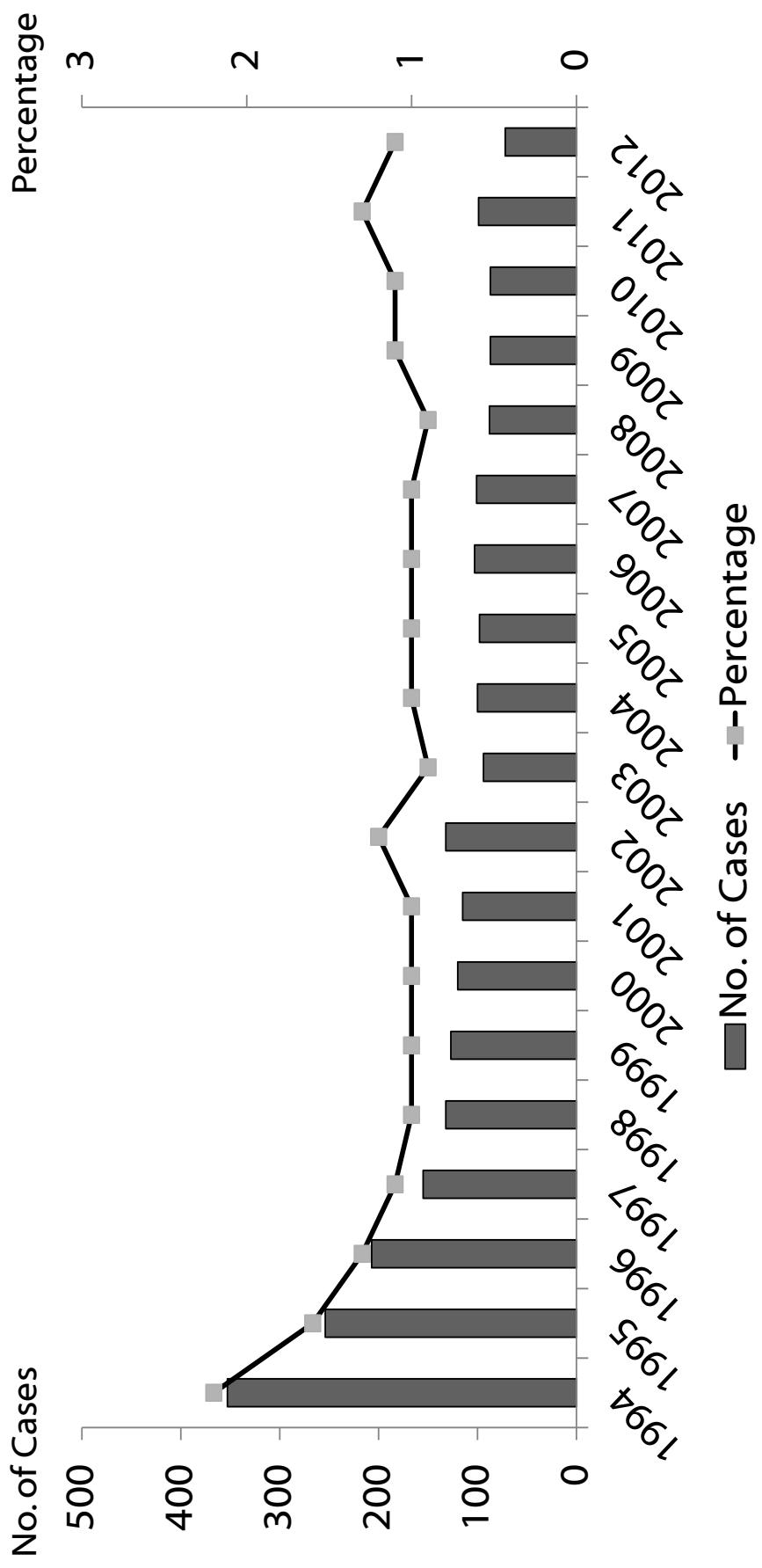


\*Updated as of June 10, 2013.

Note: Based on initial isolates from persons with no prior history of TB. Multidrug resistant TB (MDR TB) is defined as resistance to at least isoniazid and rifampin

# Surveillance Slide #22

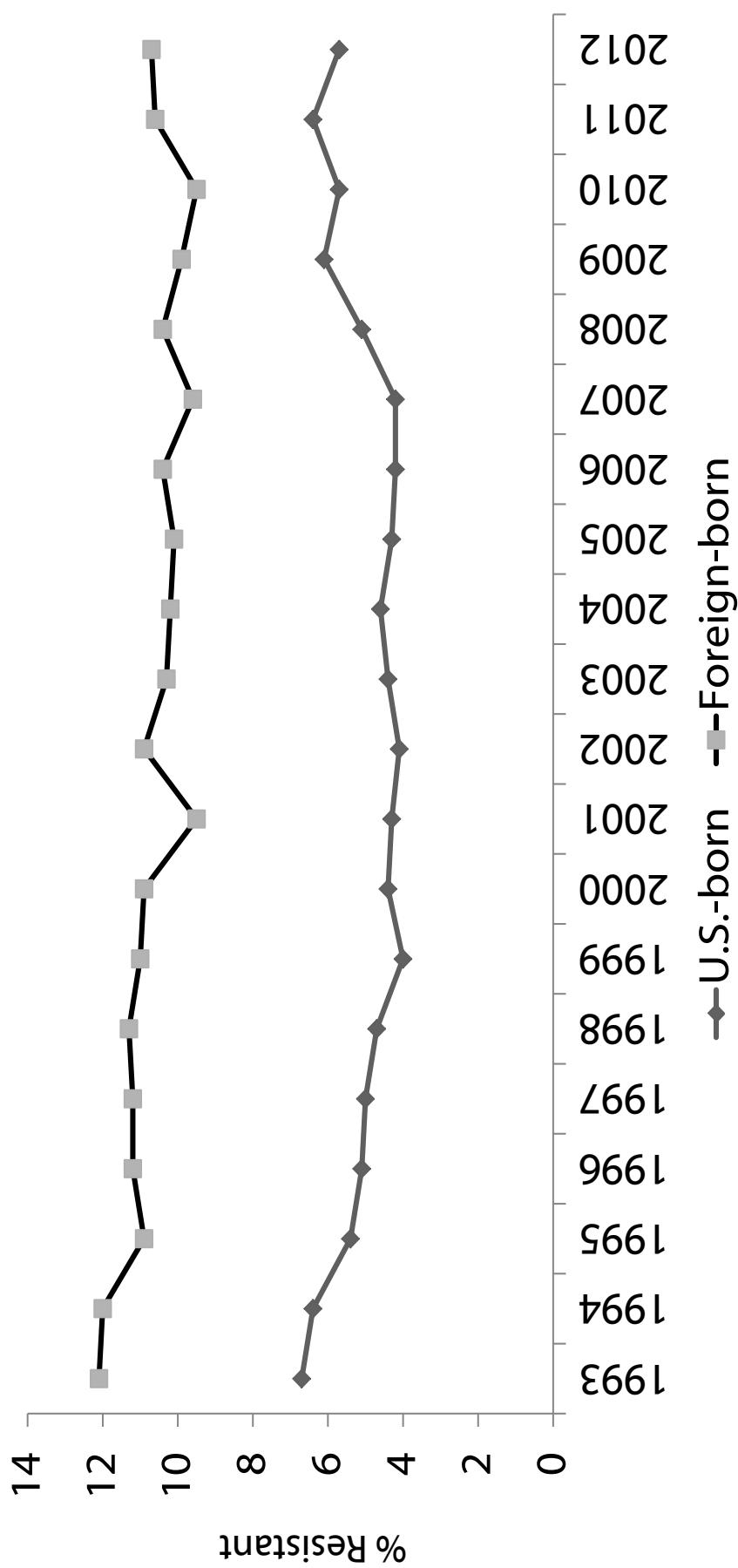
## Primary MDR TB, United States, 1993 – 2012\*



\*Updated as of June 10, 2013.

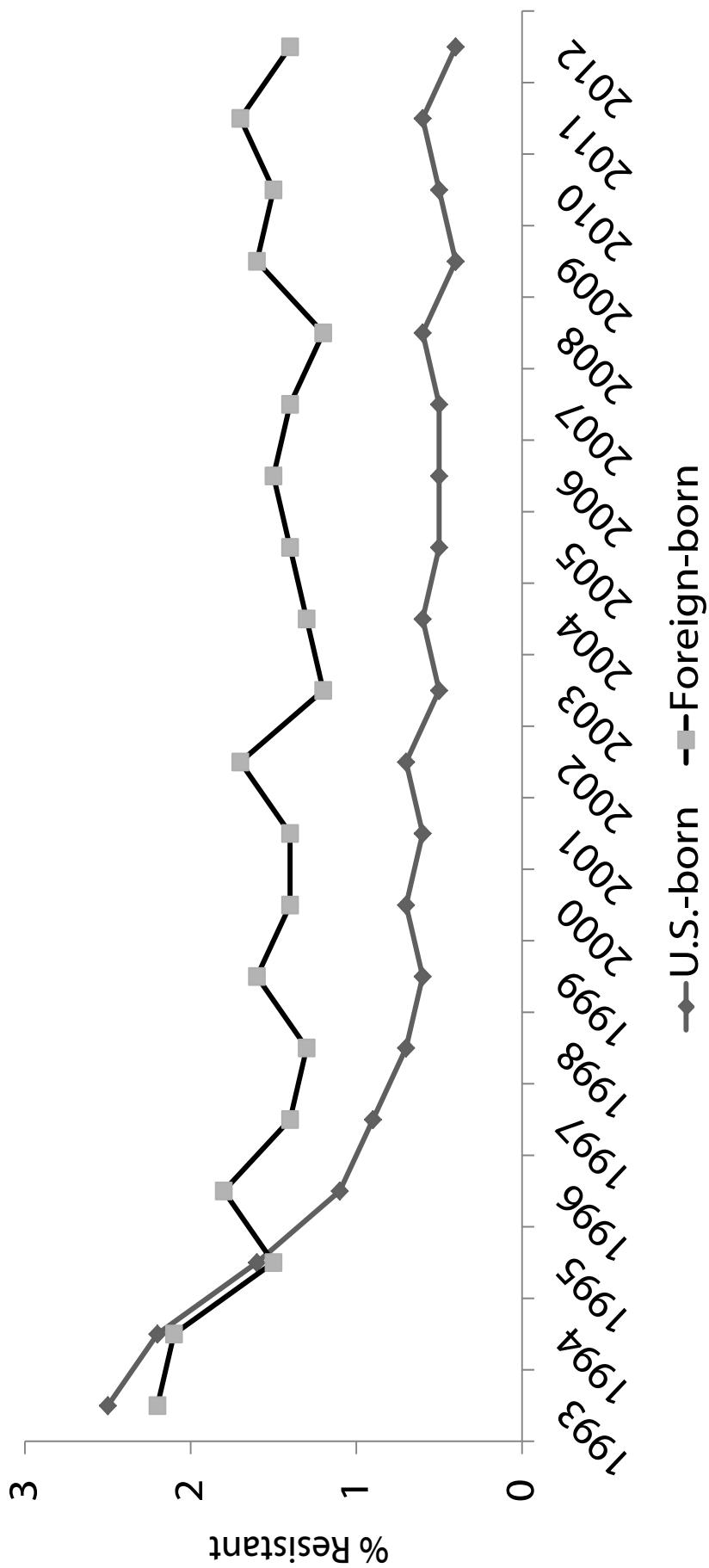
Note: Based on initial isolates from persons with no prior history of TB. MDR TB defined as resistance to at least isoniazid and rifampin.

## Primary Isoniazid Resistance in U.S.-born vs. Foreign-born Persons, United States, 1993 – 2012\*



\*Updated as of June 10, 2013.

# Primary MDR TB in U.S.-born vs. Foreign-born Persons United States, 1993 – 2012\*

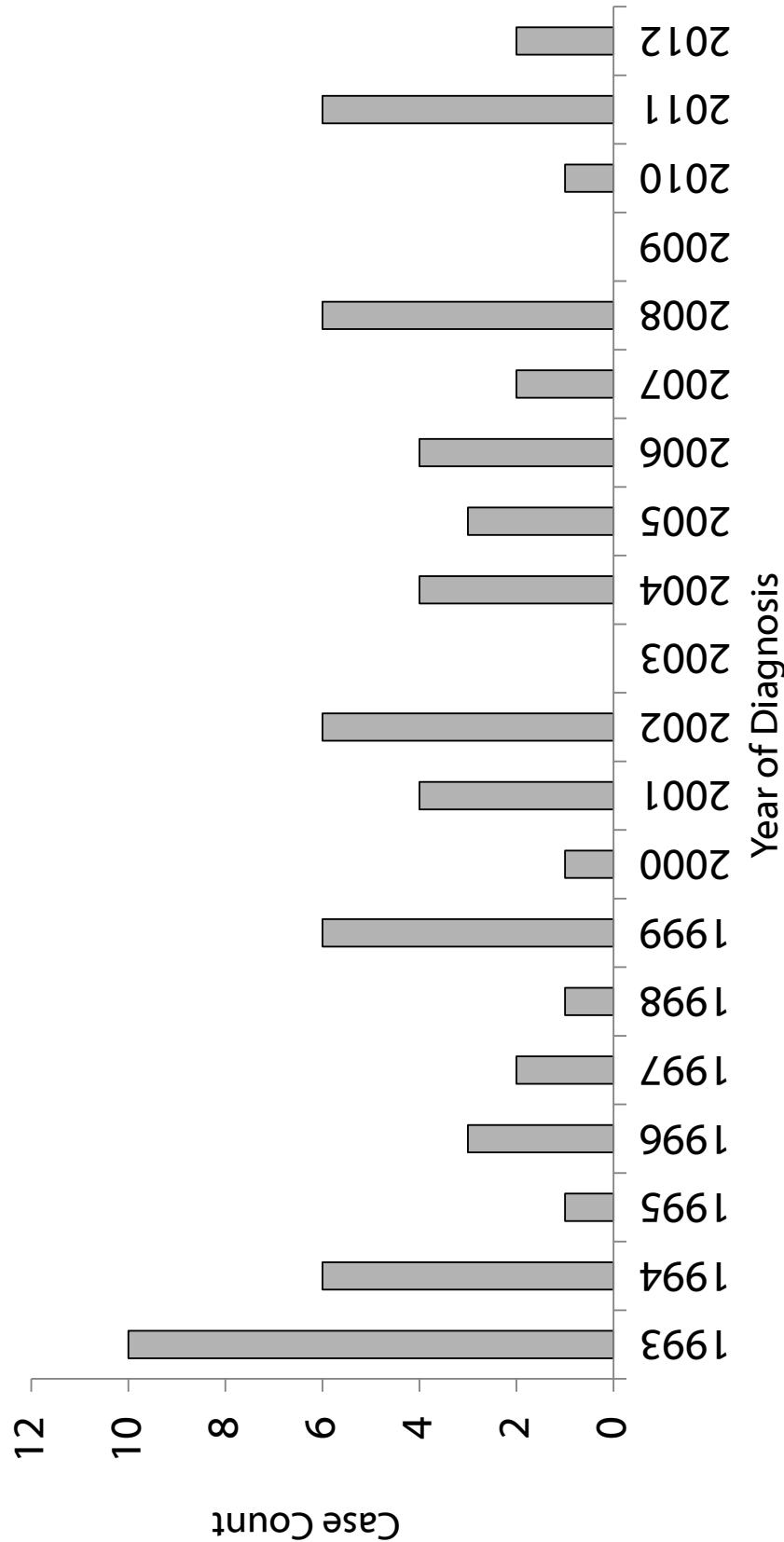


\*Updated as of June 10, 2013.

Note: Based on initial isolates from persons with no prior history of TB. MDR TB defined as resistance to at least isoniazide and rifampin.

## Surveillance Slide #25

### XDR TB Case Count Defined on Initial DST\* by Year, 1993 - 2012\*\*

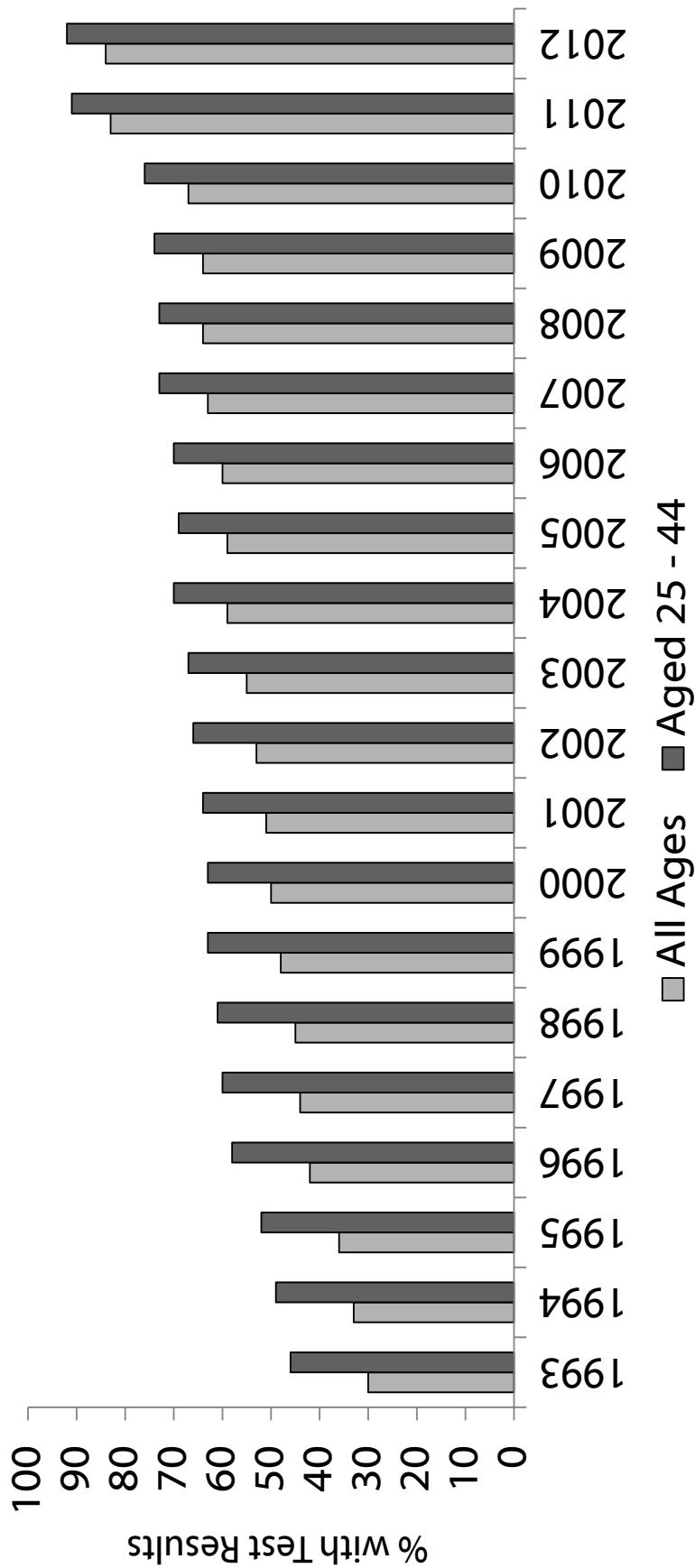


\* Drug susceptibility test

\*\* Updated as of June 10, 2013.

Note: Extensively drug-resistant TB (XDR TB) is defined as resistance to isoniazid and rifampin, plus resistance to any fluoroquinolone and at least one of three injectable second-line anti-TB drugs

## Reporting of HIV Test Results in Persons with TB by Age Group, United States, 1993 – 2012\*

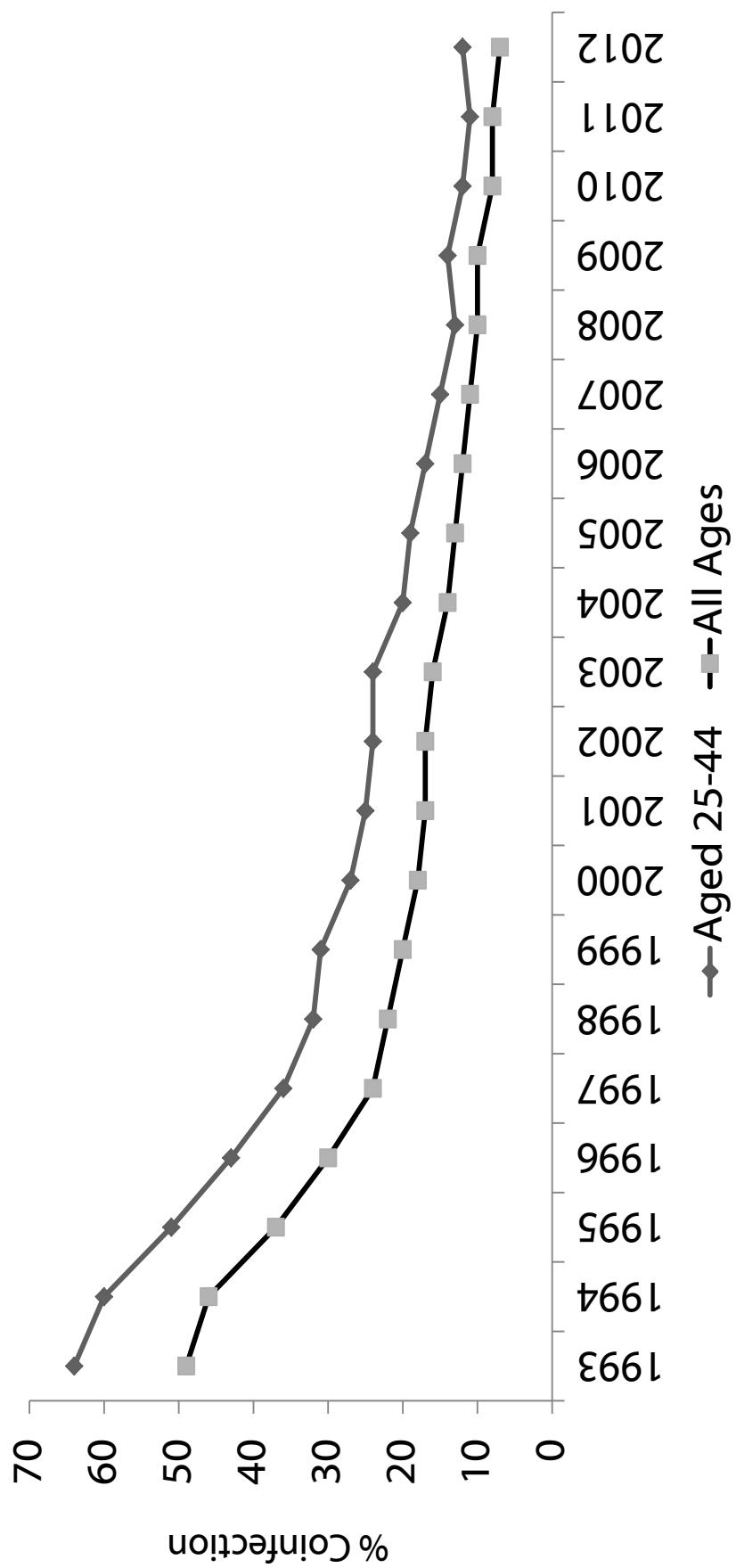


\*Updated as of June 10, 2013.

Note: Includes persons with positive, negative, or indeterminate HIV test results and persons from California with co-diagnosis of TB and AIDS. Rhode Island did not report HIV test results for years 1993–1997. HIV test results for Vermont are not included for years 2007–2010. HIV test results for California are not included for years 2005 - 2010

Surveillance Slide #27

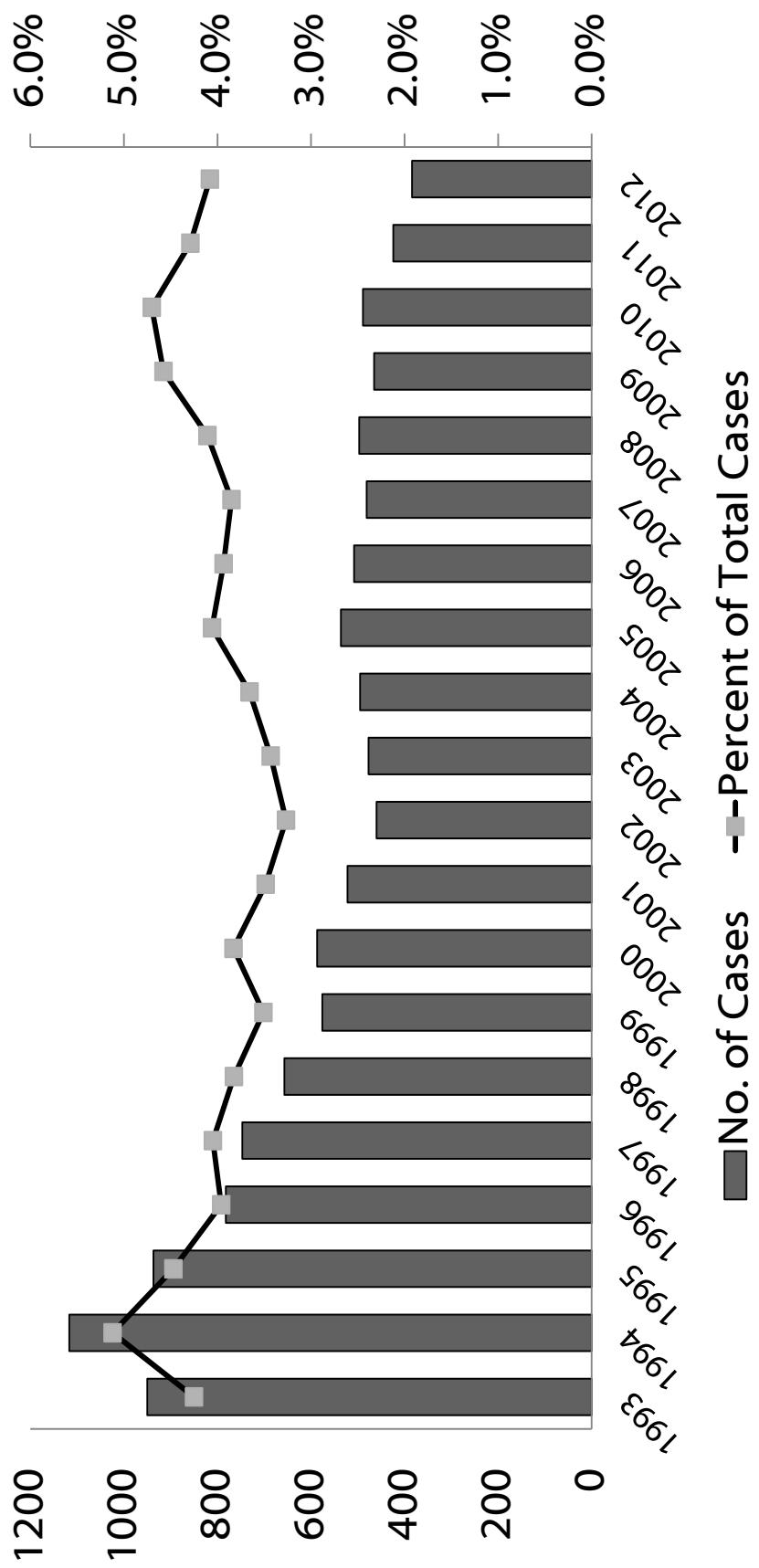
## Estimated HIV Coinfection in Persons Reported with TB, United States, 1993 – 2012\*



\*Updated as of June 10, 2013

Note: Minimum estimates based on reported HIV-positive status among all TB cases in the age group

## TB Cases by Residence in Correctional Facilities, Age $\geq 15$ , United States, 1993-2012\*

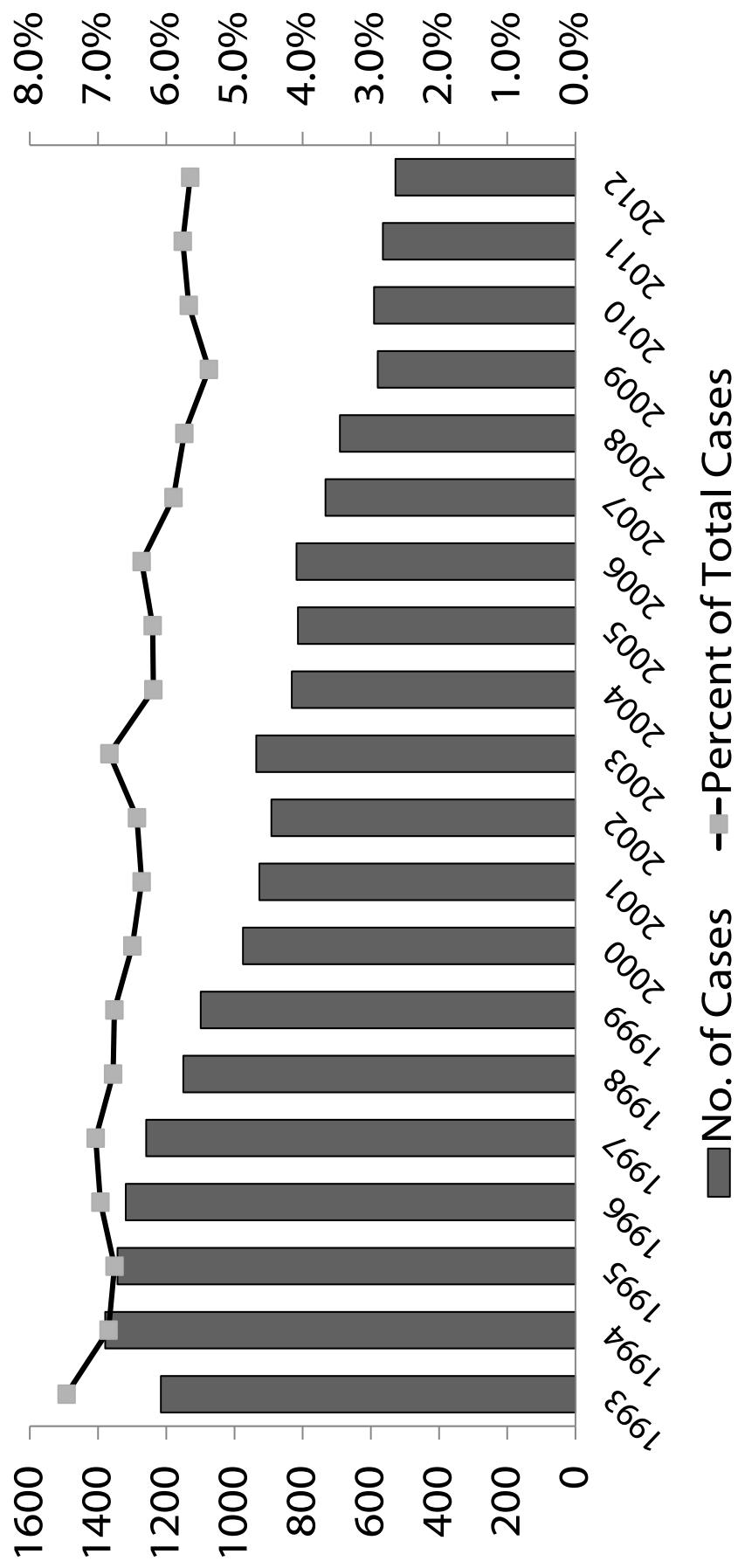


\*Updated as of June 10, 2013

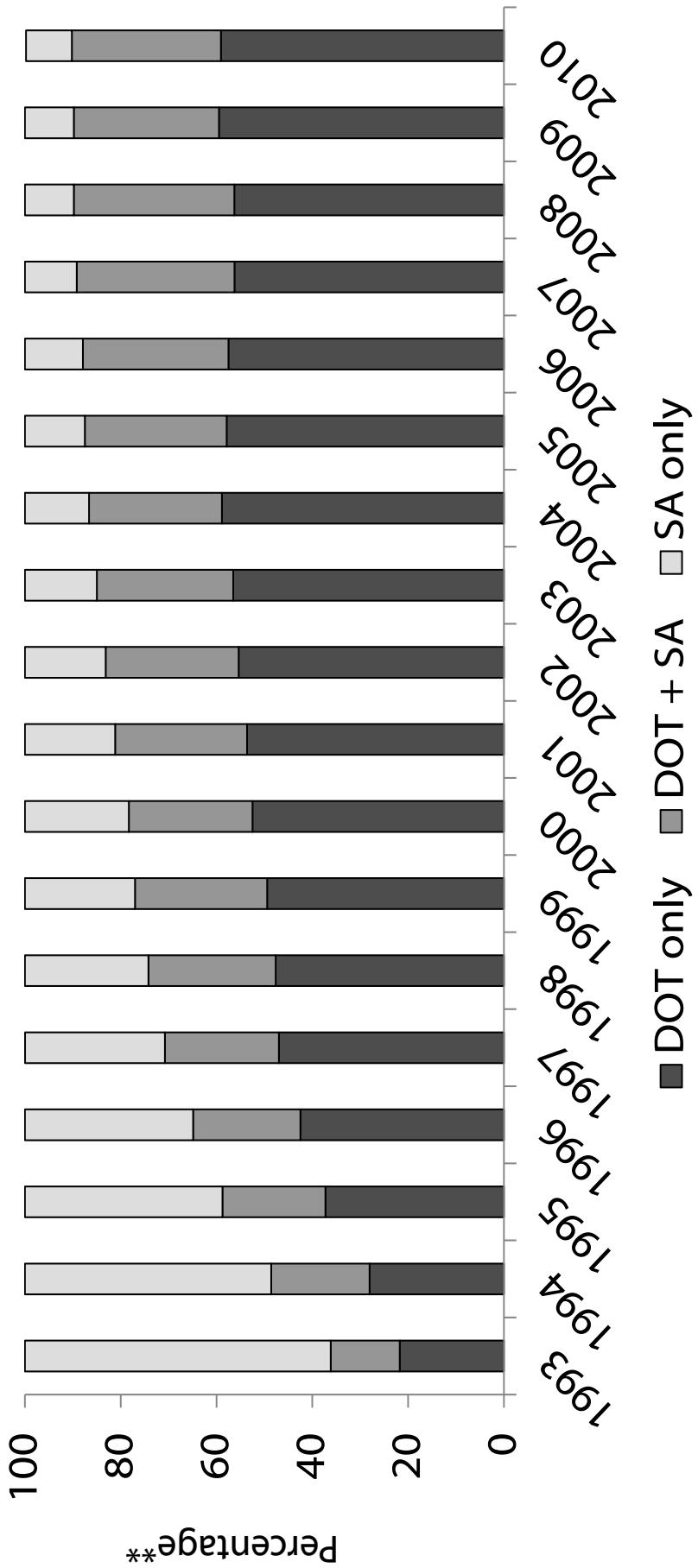
Note: Resident of correctional facility at time of TB diagnosis

Surveillance Slide #29

# TB Cases Reported as Homeless in the 12 Months Prior to Diagnosis, Age $\geq 15$ , United States, 1993-2012\*



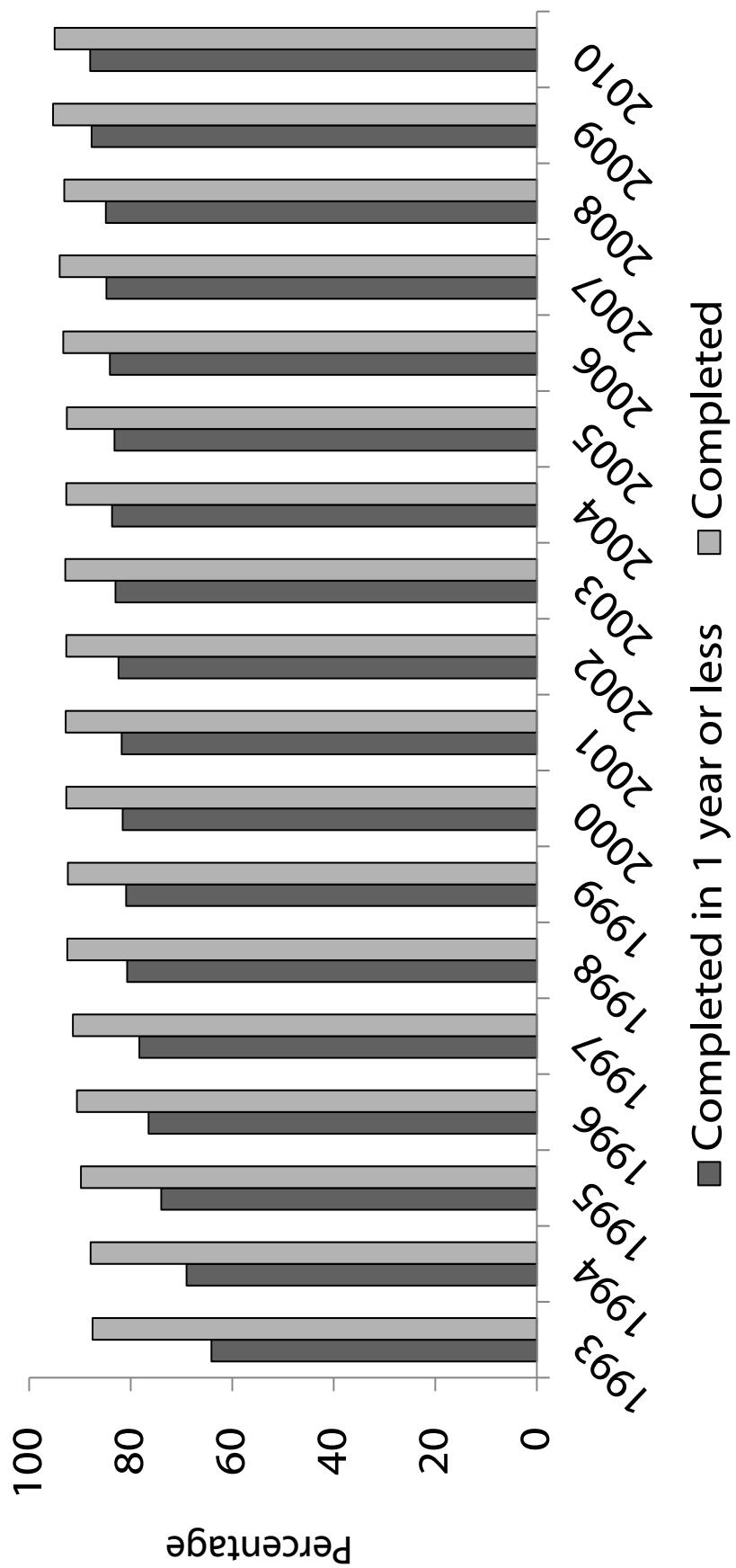
## Mode of Treatment Administration in Persons Reported with TB, United States, 1993 – 2010\*



\*Updated as of June 10, 2013. Data available through 2010 only.

\*\*Percentage of total cases in persons alive at diagnosis, with an initial regimen of one or more drugs prescribed, and excluding cases with unknown mode of treatment administration.

## Completion of TB Therapy, United States, 1993 – 2010\*



\* Updated as of June 10, 2013. Data available through 2010 only.

Note: Includes persons alive at diagnosis, with initial drug regimen of one or more drugs prescribed, who did not die during therapy.

Excludes persons with initial isolate rifampin resistant, or patient with meningal disease, or pediatric patient (aged <15) with miliary disease or positive blood culture.

## Definition for Tuberculosis Genotyping in the United States

**Spoligotype:**  
**000000000003771**

**Initial 12-locus MIRU-VNTR<sup>1</sup>:**  
**223325173533**

Sequentially assigned for  
each unique spoligotype  
and initial 12-locus MIRU-  
VNTR combination

**PCRTypE:**  
**PCR000002**

**Additional 12-locus**  
**MIRU-VNTR (MIRU2):**  
**444534423428<sup>2</sup>**

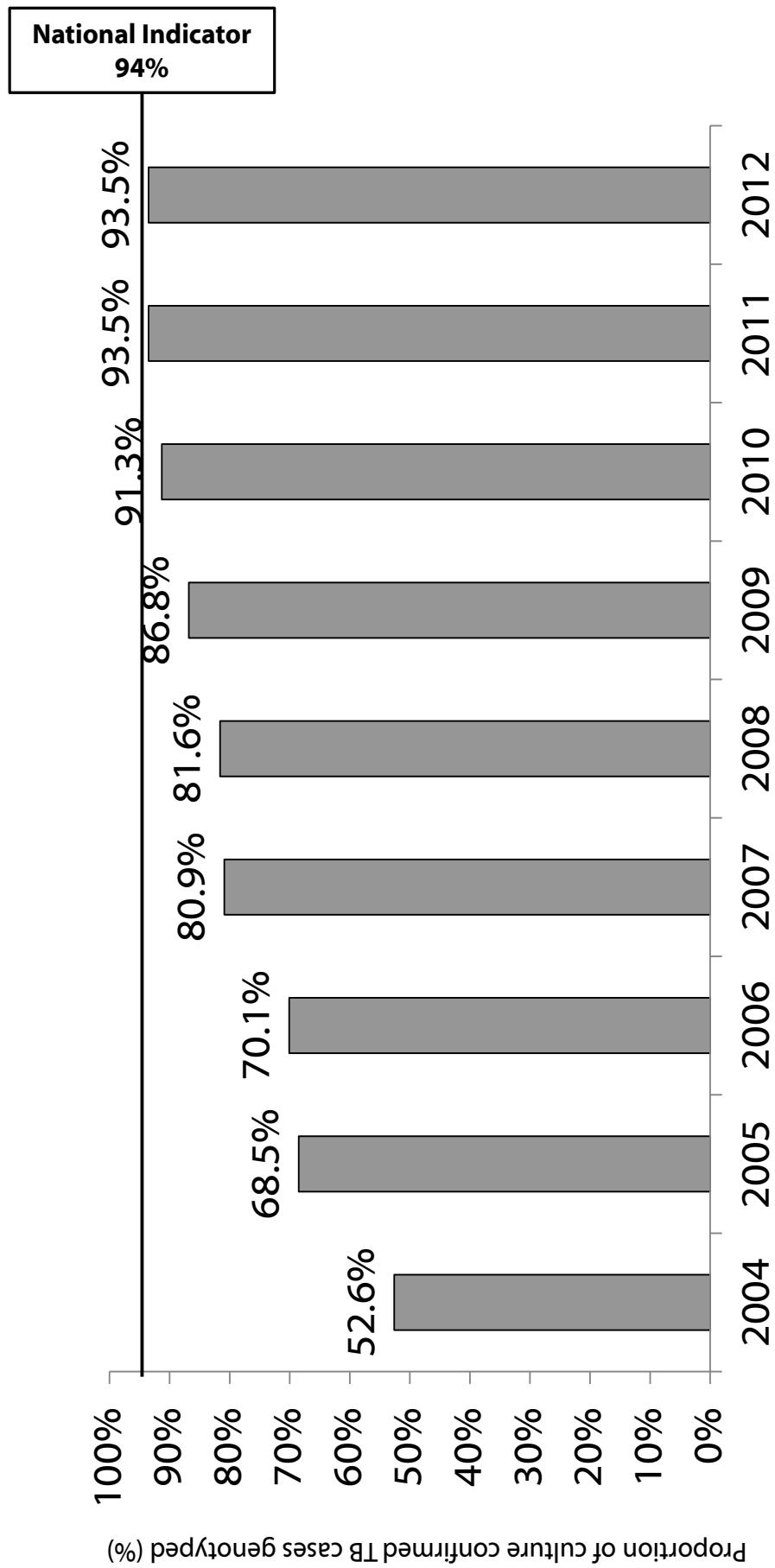
**GENTypE:**  
**G00010**

Sequentially assigned for each  
unique spoligotype and 24-  
locus MIRU-VNTR combination

<sup>1</sup> Mycobacterial interspersed repetitive unit-variable number tandem repeat

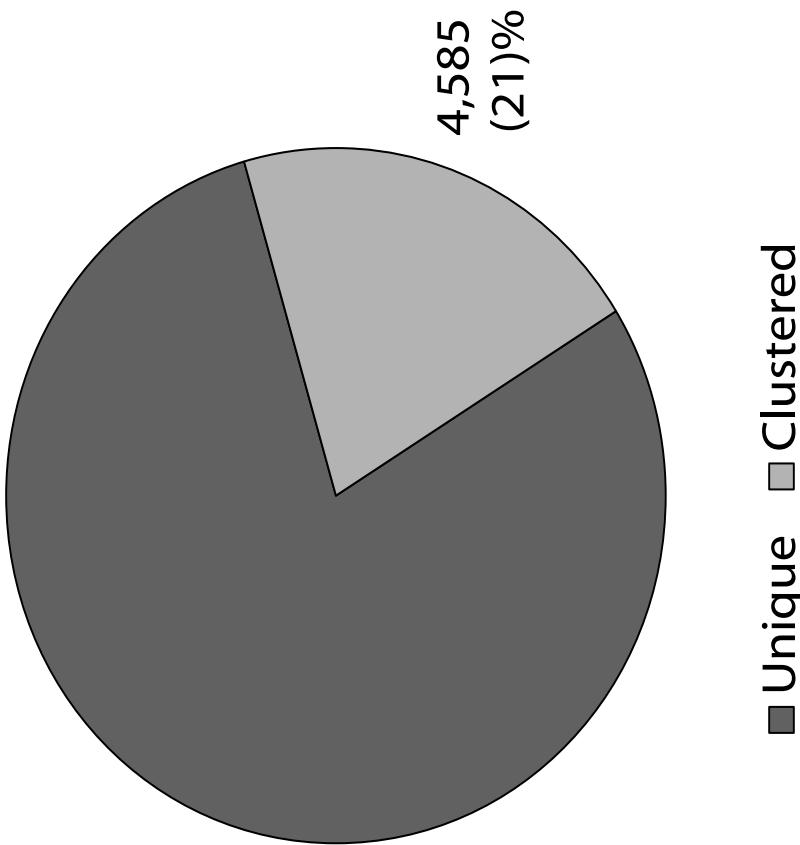
<sup>2</sup> The complete set of 24 loci is referred to as 24-locus MIRU-VNTR and is used for GENTypE designation for genotype in the U.S.

## National Tuberculosis Genotyping Surveillance Coverage\* by Year, United States, 2004–2012



\* The proportion of positive cultures with at least one genotyped isolate

## Number and Percent of Unique\* and County-GENType Clustered\*\* Cases, United States, 2010–2012

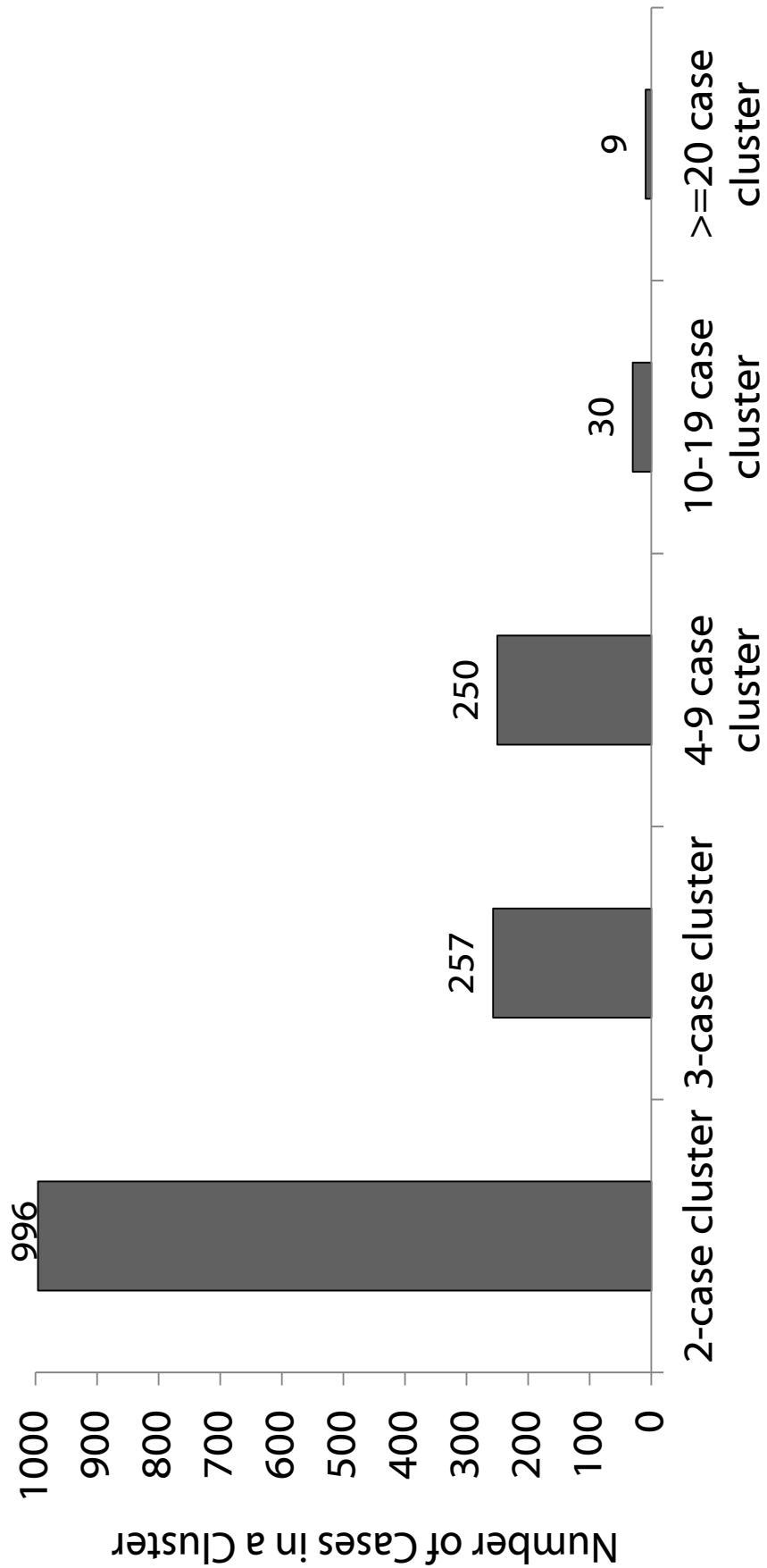


■ Unique ■ Clustered

\*Unique case is a case with a spoligotype and 24-locus locus MIRU-VNTR (GENType) that does not match any other case in that county during the specified 3-year time period

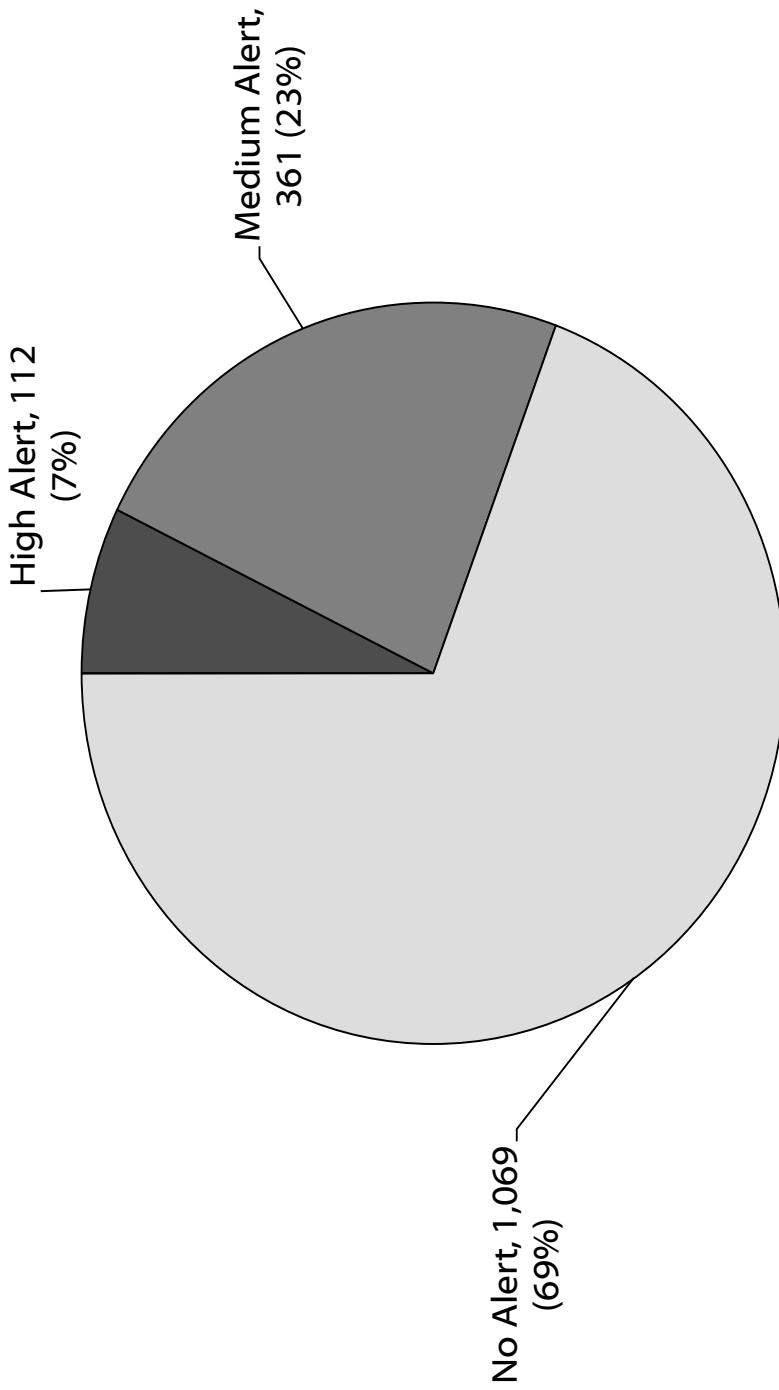
\*\* Two or more cases with matching spoligotype and 24-locus locus MIRU-VNTR (GENType) within a county during the specified 3-year time period

## Number of County-based Tuberculosis Genotype Clusters\* by Cluster Size, United States, 2010–2012



\* Genotype cluster is defined as two or more cases with matching spoligotype and 24-locus MIRU-VNTR (GENType) within a county during the specified 3-year time period

## Tuberculosis Genotype Clusters by TB GIMS\* Alert Levels\*\*, United States, 2010-2012



\*Tuberculosis Genotyping Information Management System

\*\*Alert level is determined by the log likelihood ratio statistic (LLR) for a given cluster, identifying higher than expected geospatial concentrations for a TB genotype cluster in a specific county, compared to the national distribution of that genotype; TB GIMS generates alert level notifications based on this statistic: "No alert" is indicated if LLR is between 0-5, "medium" is for LLR of 5.1-10 and "high" alert is for clusters with LLR >10

## Tuberculosis in the United States

### National Tuberculosis Surveillance System Highlights from 2012

**Slide 1 (title slide). Tuberculosis in the United States—National Tuberculosis Surveillance System, Highlights from 2012.** This slide set was prepared by the Division of Tuberculosis Elimination, Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (DHHS). It provides trends for the recent past and highlights data collected through the National Tuberculosis Surveillance System for 2012. Since 1953, through the cooperation of state and local health departments, CDC has collected information on newly reported cases of tuberculosis (TB) disease in the United States. The data presented here were collected via the revised TB case report introduced in 2009. Currently, each individual TB case report (Report of Verified Case of Tuberculosis or RVCT) is submitted electronically to CDC. The data for this slide set are based on updates received by CDC as of June 10, 2013. All case counts and rates for years 1993–2012 have been updated.

**Slide 2. Reported TB Cases, United States, 1982–2012.** The resurgence of TB in the mid-1980s was marked by several years of increasing case counts until its peak in 1992. Case counts began decreasing again in 1993, and 2012 marked the twentieth year of decline in the total number of TB cases reported in the United States since the peak of the resurgence. From 1992 until 2002, the total number of TB cases decreased 5%–7% annually. From 2002 to 2003, however, the total number of TB cases decreased by only 1.4%. An unprecedented decrease occurred in 2009, when the total number of TB cases decreased by more than 10% from 2008 to 2009. In 2012, a total of 9,945 cases were reported from the 50 states and the District of Columbia (DC). This represents a decline of 5.9% from 2011 and 69.2% from 1992.

**Slide 3. TB Morbidity, United States, 2007–2012.** This slide provides the total number of reported U.S. TB cases and the associated rates for each of the past 6 years. Rate is defined as cases per 100,000 population. The number of TB cases decreased from 13,282 in 2007 to 9,945 in 2012, and the TB rate decreased from 4.4 in 2007 to 3.2 in 2012.

**Slide 4. TB Case Rates, United States, 2012.** This map shows TB rates for 2012. Forty states reported a rate less than 3.2TB cases per 100,000, the 2012 national average. Ten states and DC reported a rate above 3.2 TB cases per 100,000; these accounted for 61% of the national total in 2012 and have experienced substantial overall decreases in cases and rates from 1992 through 2012.

**Slide 5. Map of U.S.-Affiliated Pacific Islands by TB Case Rates, 2012.** This map of the Pacific region shows the case rates by jurisdiction.

**Slide 6. TB Case Rates, U.S.-Affiliated Pacific Islands, 2012.** This bar chart shows TB rates for the U.S. Pacific Islands for reported cases in 2012. These case rates range from 1.8 per 100,000 in American Samoa to 211.7 per 100,000 in the Republic of the Marshall Islands. The overall case rate for the United States (3.2 per 100,000) and for Hawaii (8.4 per 100,000) are also shown

**Slide 7. TB Case Rates by Age Group, United States, 1993–2012.** This slide shows the last 20 years' declining trend in TB rates by age group. In 2012, case rates in all age groups declined by more than 50% from 1993 values: persons 65 years and older (from 17.7 per 100,000 in 1993 to 5.1in 2012); adults aged 45 to 64 years (from 12.4 to 3.8); adults aged 25 to 44 years (from 11.5 to 3.8); those 15 to 24 years of age (from 5.0 to 2.3); and in children under 15 years of age (from 2.9 to 0.8)

**Slide 8. Reported TB Cases by Age Group, United States, 2012.** This pie chart shows the age distribution of persons reported with TB in 2012. Five percent were children under 15 years of age, 10% were age 15 to 24, 31% were age 25 to 44, 31% were age 45 to 64, and 22% were at least 65 years old.

**Slide 9. TB Case Rates by Age Group and Sex, United States, 2012.** This slide graphs the TB rates in 2012 by age group and sex. It shows that rates tended to increase with age, ranging from a low of less than 1 per 100,000 in children aged 5 - 14 to a high of 7.3 per 100,000 in men 65 years and older. As age increased, the case rate in men increased faster than women; the rates in men 45 years and older were approximately more than twice those in same-age women.

**Slide 10. TB Case Rates by Race/Ethnicity, United States, 2003–2012.** This slide shows the declining trend in TB rates by race/ethnicity during the last 11 years. Asians had the highest TB rates, which declined from 29.9 per 100,000 in 2003 to 18.9 in 2012, and had a percent decline over the time period of 37%. Rates also declined in the following racial/ethnic groups: among non-Hispanic blacks or African-Americans, from 11.7 in 2003 to 5.8 in 2012 (-50%); among Hispanics, from 10.3 to 5.3 (-48%); among American Indians and Alaska Natives, from 8.2 to 6.3 (-23%); and among non-Hispanic whites, from 1.4 to 0.8 (-43%). Rates also decreased among Native Hawaiian or Other Pacific Islanders, from 16.2 in 2003 to 12.3 in 2012 (-24%).

Several important factors likely contribute to the disproportionate burden of TB in minorities. In persons who were born in countries where TB is common, TB disease may result from infection acquired in the country of origin. Unequal distribution of TB risk factors, such as HIV infection, may also contribute to increased exposure to TB or to an increased risk of developing TB once infected with *M. tuberculosis*.

**Slide 11. TB Case Rates by Age Group and Race/Ethnicity, United States, 2012.** This slide presents TB rates in 2012 by age group and race/ethnicity. After infancy (age under 5), risk typically increased with age across all racial and ethnic groups. Rates were consistently higher in minority racial and ethnic groups than in non-Hispanic whites. Rates were the highest in Asians and Native Hawaiians and Other Pacific Islanders, particularly in adult age groups.

**Slide 12. Reported TB Cases by Race/Ethnicity, United States, 2012.** In 2012, 84% of all reported TB cases occurred in racial and ethnic minorities (31% in Asians, 29% in Hispanics, 22% in non-Hispanic blacks or African-Americans, 1% in American Indians or Alaska Natives, and 1% in Native Hawaiians or Other Pacific Islanders), whereas 16% of cases occurred in non-Hispanic whites. Persons reporting two or more races totaled less than 1% of all cases.

**Slide 13. Number of TB Cases in U.S.-born vs. Foreign-born Persons, United States, 1993–2012.** This graph plots the number of U.S.-born vs. foreign-born persons reported with TB each year, from 1993 through 2012. It illustrates the increase in the percentage of cases occurring in foreign-born persons during this period, from 29% in 1993 to 63% in 2011. Overall, the number of cases in foreign-born persons remained virtually level, with approximately 7,000–8,000 cases each year before 2009, until 2009 when the number dropped to 6,854. That decreasing trend continued in 2012 with the number of foreign-born cases dropping to 6,274. The number in U.S.-born persons decreased from more than 17,000 in 1993 to 3,659 in 2012.

**Slide 14. Trends in TB Cases in Foreign-born Persons, United States, 1991–2012.** This slide shows trends in the past 21 years of TB cases in foreign-born persons in the United States from 1992 through 2012. The percentage of TB cases accounted for by foreign-born persons increased from 29% in 1992 to 63% in 2012.

**Slide 15. Reported TB Cases by Origin and Race/Ethnicity, United States, 2012.** Among U.S.-born persons with TB in 2012, 37% were non-Hispanic black or African-American, 35% were non-Hispanic white, 19% were Hispanic or Latino, 3% were Asian, 4% were American Indian or Alaska Native, and 1% were Native Hawaiian or Other Pacific Islander. Among the foreign-born, 45% were Asian, 34% were Hispanic or Latino, 14% were non-Hispanic black or African-American, and 5% were non-Hispanic white. Cases among American Indians or Alaska Natives and among Native Hawaiians or Other Pacific Islanders constituted less than 1%, respectively, of the cases among the foreign-born and are not shown. Persons reporting two or more races totaled less than 1% of all cases.

**Slide 16. Percentage of TB Cases Among Foreign-born Persons, United States, 2002 and 2012.** The percentage range of the total number of TB cases that occurred in foreign-born persons in each state is highlighted for 2002 and 2012 in these side-by-side maps. The number of states with less than 25% of their TB cases among the foreign-born decreased from 11 states in 2002 to 7 states in 2012. The number of states with at least 25–49% of cases among the foreign-born decreased from 18 states in 2002 to 13 states in 2012. However, the number of states that had 50% or more of their cases among the foreign-born increased from 23 states in 2002 to 31 states in 2012.

**Slide 17. TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993–2012.** TB rates in foreign-born persons remain higher than those in the U.S.-born population. From 1993 through 2012, the rates in U.S.-born persons decreased from 7.4 per 100,000 to 1.4, whereas the rates in foreign-born persons decreased from 34.0 per 100,000 to 15.9.

**Slide 18. TB Case Rates in U.S.-born vs. Foreign-born Persons, United States, 1993–2012.** This is the same as Slide 15, but the rates are presented on a logarithmic scale to better illustrate the trend in TB rates among the U.S.-born and foreign-born. The lines show a greater rate of decline among the U.S.-born compared with the foreign-born during this period.

**Slide 19. Countries of Birth of Foreign-born Persons Reported with TB, United States, 2012.** This slide shows the overall distribution of the countries of birth of foreign-born persons reported with TB in 2012, with the top seven highlighted. The list of countries has remained relatively constant since 1986, when information on country of birth was first reported by all areas submitting reports to CDC. In 2012 the seven top countries accounted for 61% of the total cases, with Mexico accounting for 21%; the Philippines, 12%; India, 8%; Vietnam, 7%; China, 6%; Guatemala, 3%; and Haiti, 3%. Persons from more than 135 other countries each accounted for 2% or less of the total, but altogether accounted for 39% of foreign-born persons reported with TB.

**Slide 20. Percent of Foreign-born with TB by Time of Residence in U.S. Prior to Diagnosis, 2012.** The length of U.S. residence among foreign-born persons prior to their TB diagnosis in 2012 is shown in these stacked bars. Overall, 15% had been in the United States for less than 1 year, 18% between 1 and 4 years, and 59% for at least 5 years. The distribution is also shown for the top three countries of birth: Mexico, the Philippines, and India. Among persons born in Mexico, 9% had been in the United States for less than 1 year, 10% between 1 and 4 years, and 70% for at least 5 years. Among persons born in the Philippines, 11% had been in the United States for less than 1 year, 10% between 1 and 4 years, and 70% for at least 5 years. Among persons born in India, 17% had been in the United States for less than 1 year, 26% between 1 and 4 years, and 50% for at least 5 years. Values for unknown length of residence in U.S. for these top three countries ranged between 9 – 10% for 2012.

**Slide 21. Primary Anti-TB Drug Resistance, United States, 1993–2012.** Primary drug resistance is shown for the past 20 years. The graph starts in 1993, the year in which the individual TB case reports submitted to the national surveillance system began collecting information on initial susceptibility test results for patients with culture-positive TB. Data were available for more than 85% of culture-positive cases for each year. Primary resistance was calculated by using data from persons with no reported prior TB episode. Resistance to at least isoniazid was 8.2% in 1993; however by 2012, this had increased to 8.9%. Resistance to at least isoniazid and rifampin, known as multidrug-resistant TB (MDR TB), was 2.5% in 1993; the percent of primary MDR TB has remained approximately stable since it decreased to 1.0% in 1998. In 2012 the percent of primary MDR TB was 1.1%.

**Slide 22. Primary MDR TB, United States, 1993–2012.** This graph focuses on trends in primary MDR TB (based on initial isolates from persons with no prior history of TB) in the United States from 1993 through 2012. The number of primary MDR TB cases, represented by bars, steadily declined from 407 in 1993 to 132 in 2002. Since then, the total number of primary MDR TB cases has fluctuated between 87 to 103 cases, with 72 cases reported for 2012. Primary MDR TB, shown by the line, decreased from 2.5% in 1993 to approximately 1.0% in 1998, and has fluctuated around 1.0% since then. In 2012, the percentage was 1.1%.

**Slide 23. Primary Isoniazid Resistance in U.S.-born vs. Foreign-born Persons, United States, 1993–2012.** This graph shows primary isoniazid resistance in U.S.-born vs. foreign-born persons. Based on initial isolates from persons with no prior history of TB, the percentage of isoniazid resistance is more than twice as high among foreign-born persons than among U.S.-born persons. In foreign-born persons, the percentage declined from 12.1% in 1993 to 10.7% in 2012. In U.S.-born persons, the percentage decreased from 6.7% in 1993 to 4.2% in 2007, but has increased since then to 5.7% in 2012.

**Slide 24. Primary MDR TB in U.S.-born vs. Foreign-born Persons, United States, 1993–2012.** This graph highlights primary MDR TB in U.S.-born versus foreign-born persons. The percentage with primary MDR TB has declined among both groups since 1993, although the decline in the U.S.-born has been greater. As a result, the proportion of primary MDR TB cases in the US that are attributed to foreign-born persons increased from approximately 25% in 1993 to 86% in 2012 (not shown on slide). Among the U.S.-born, the percentage with primary MDR TB has been less than 1% since 1997 and was 0.4% in 2011. The percentage among foreign-born persons has fluctuated year by year, although it has remained between 1.2 and 1.8% since 1995. In 2012, the percentage of primary MDR TB among foreign-born persons was 1.4%

**Slide 25. Extensively Drug Resistant (XDR) TB, as Defined on Initial Drug Susceptibility Testing (DST), United States, 1993–2012.** This graph shows the annual number of counted XDR TB cases as defined on initial DST from 1993–2012. XDR TB is defined as resistance to isoniazid and rifampin, plus resistance to any fluoroquinolone and at least one of three injectable second-line anti-TB drugs. Two cases of XDR TB were reported in 2012. The most reported in a single year was 10 in 1993, while there were no cases reported in 2003 and 2009. There is no apparent trend in the number of cases over time.

**Slide 26. Reporting of HIV Test Results in Persons with TB by Age Group, United States, 1993–2012.** This slide shows the completeness of reporting of HIV test results in persons with TB by age group from 1993 through 2012. The percentage of TB patients for whom test results were reported increased from 30% among all ages in 1993 to 84% in 2012. Among adults aged 25–44 years, the percentage increased from 46% in 1993 to 92% in 2012. California began reporting HIV test results to CDC in 2011; this accounts for the substantial percentage increase for that year.

**Slide 27. Estimated HIV Coinfection in Persons Reported with TB, United States, 1993–2012.** This slide provides minimum estimates of HIV coinfection among persons reported with TB from 1993 through 2012. Since the addition of the request for HIV status to the individual TB case report in 1993, incomplete reporting has provided a challenge to calculating reliable estimates. Results from the cross-matching of TB and AIDS registries have been used to supplement reported HIV test results. For all ages, the estimated percentage of HIV coinfection in persons who reported HIV testing (positive, negative, or indeterminate test results) with TB decreased from 49% to 7% overall from 1993 – 2012, and from 64% to 12% among persons aged 25 to 44 years during this period.

**Slide 28. TB Cases by Residence in Correctional Facilities, Age ≥15, United States, 1993–2012.** This graph highlights the number of cases that were a resident of any type of correctional facility at the time of TB diagnosis. Cases must have been 15 years of age or greater. The number of cases residing in a correctional facility has decreased from a high of 1,117 cases in 1994 to 384 cases in 2012. Between the years 2000 and 2010, the number of cases residing in a correctional facility ranged between the high-400s and high-500s; 2011 was the first year to drop below this range to 424 cases. Of total cases, the percentage of cases residing in a correctional facility has ranged from 5.1% in 1994 to 3.3% in 2002. The 1990s saw a decreasing trend in percentage until 2002. Since 2002, there has been an increasing trend in percentage; in 2012 the percentage of total cases was 4.1%.

**Slide 29. TB Cases by Homeless Status, Age ≥15, United States, 1993–2012.** This graph highlights the status of cases that were homeless within twelve months prior of TB diagnosis from 1993 through 2012. Cases must have been 15 years of age or greater. The number of homeless cases has decreased from a high of 1,379 cases in 1994 to 528 in 2012. This category has seen an overall decrease in cases since 1994; increases were observed in the years 2003 (6.8%), 2006 (6.4%), and 2010 (5.7%); these have been exceptions with a small increase in cases. Of total cases, 6.8% were homeless in 1994 and percentages have ranged between 7.5% in 1993 and a low of 5.4% in 2009. It has since increased to 5.7% in 2012.

**Slide 30. Mode of Treatment Administration in Persons Reported with TB, United States, 1993–2010.** In 1993, the reporting areas began providing information about mode of treatment administration on the individual TB case report form. Treatment administered as only directly observed therapy (DOT) increased from 21.7% in 1993 to 59.1% in 2010, the latest year with available data. The proportion of patients who received at least some portion of their treatment as DOT (based on combining the percentage of patients who received only DOT and the percentage for whom some portion was self-administered) was 31.1% in 2010. In 2010, 90.4% of patients received at least some portion of their treatment as DOT.

**Slide 31. Completion of TB Therapy, United States, 1993–2010.** The reporting areas began providing information on completion of therapy in 1993 through the individual TB case report form. The calculations exclude persons with initial isolate rifampin resistant, or patient with meningeal disease, or pediatric patient (aged <15) with miliary disease or positive blood culture. Overall completion of therapy had remained at approximately 92-93% from 1998 through 2008, but increased to 95% in 2009. Completion in 1 year or less increased from 64% in 1993 to 88% in 2010, the latest year with available data. The current DHHS Healthy People 2020 objective is completion of therapy in 1 year or less in 93% of patients. CDC is working with state and local health departments to determine and evaluate reasons for apparently delayed completion of therapy, which may vary by jurisdiction.

**Slide 32. Definition for Tuberculosis Genotyping in the United States.** This slide shows the schematic for sequential assignment of unique spoligotypes and initial 12-locus MIRU-VNTR combination or 24-locus MIRU-VNTR combination.

**Slide 33. National Tuberculosis Genotyping Surveillance Coverage by Year, United States, 2004–2012.** This slide shows the increase in genotyping surveillance coverage from 2004 to 2012. In 2004 the proportion of positive cultures with at least one genotyped isolate was 52.6%; in 2012 it was 93.5%. The national indicator for genotyping surveillance coverage is 94%.

**Slide 34. Number and Percent of Unique and County-GENType Clustered Cases, United States, 2010–2012.** This slide shows a chart with the percentage of unique and clustered cases. Unique cases are those with a spoligotype and 24-locus locus MIRU-VNTR (GENType) that does not match any other case in that county during the specified three year time period. Clustered cases are two or more cases with matching spoligotype and 24-locus locus MIRU-VNTR (GENType) within a county during the specified three year time period. In the 2010 – 2012 three year time period, there were 79% unique cases, and 21% clustered cases.

**Slide 35. Number of County-based Tuberculosis Genotype Clusters by Cluster Size, United States, 2010–2012.** This slide shows the number of county-based TB genotype clusters by the size of the clusters; genotype cluster is defined as two or more cases with matching spoligotype and 24-locus MIRU-VNTR (GENType) within a county during the specified three year time period. In the 2010 – 2012 three year time period, there were 996 two-case clusters, 257 three-case clusters, 250 4–9-case clusters, 30 10 – 19 case clusters, and nine case clusters that were greater or equal to 20 in size.

**Slide 36. Tuberculosis Genotype Clusters by TB GIMS Alert Levels, United States, 2010–2012.** This slide shows a chart with percentage of genotype clusters by alert level. Alert level is determined by the log likelihood ratio statistic (LLR) for a given cluster, identifying higher than expected geospatial concentrations for a TB genotype cluster in a specific county, compared to the national distribution of that genotype; TB GIMS generates alert level notifications based on this statistic: “No alert” is indicated if LLR is between 0–5, “medium” is for LLR of 5.1–10 and “high” alert is for clusters with LLR >10. In the 2010–2012 three year time period, high alerts made up 7% of the total, medium alerts were 23%, and no alert were 69%.



# **Appendices**



# **Appendix A**

## **Tuberculosis Case Definition for Public Health Surveillance<sup>1</sup> (Revised May 13, 2009)**

### **Clinical description**

A chronic bacterial infection caused by *Mycobacterium tuberculosis*, usually characterized pathologically by the formation of granulomas. The most common site of infection is the lung, but other organs may be involved.

### **Clinical case definition**

A case that meets **all** of the following criteria:

- A positive tuberculin skin test result or positive interferon gamma release assay for *M. tuberculosis*
- Other signs and symptoms compatible with tuberculosis (TB) (e.g., abnormal chest radiograph, abnormal chest computerized tomography scan or other chest imaging study, or clinical evidence of current disease)
- Treatment with two or more anti-TB medications
- A completed diagnostic evaluation

### **Laboratory criteria for diagnosis**

- Isolation of *M. tuberculosis* complex from a clinical specimen,\*  
**or**
- Demonstration of *M. tuberculosis* complex from a clinical specimen by nucleic acid amplification test,†  
**or**
- Demonstration of acid-fast bacilli in a clinical specimen when a culture has not been or cannot be obtained or is falsely negative or contaminated.

### **Case classification**

Confirmed: a case that meets the clinical case definition or is laboratory confirmed

### **Comment**

A case should not be counted twice within any consecutive 12-month period. However, a case occurring in a patient who had previously had verified TB disease should be reported and counted again if more than 12 months have elapsed since the patient completed therapy. A case should also be reported and counted again if the patient was lost to supervision for greater than 12 months and TB disease can be verified again. Mycobacterial diseases other than those caused by *M. tuberculosis* complex should not be counted in tuberculosis morbidity statistics unless there is concurrent tuberculosis.

\*Use of rapid identification techniques for *M. tuberculosis* (e.g., DNA probes and mycolic acid high-pressure liquid chromatography performed on a culture from a clinical specimen) are acceptable under this criterion.

†Nucleic acid amplification (NAA) tests must be accompanied by culture for mycobacteria species for clinical purposes. A culture isolate of *M. tuberculosis* complex is required for complete drug susceptibility testing and also genotyping. However, for surveillance purposes, CDC will accept results obtained from NAA tests approved by the Food and Drug Administration (FDA) and used according to the approved product labeling on the package insert, or a test produced and validated in accordance with applicable FDA and Clinical Laboratory Improvement Amendments (CLIA) regulations.

# Appendix B

## Recommendations for Reporting and Counting Tuberculosis Cases (Revised May 13, 2009)

Since publication of the “Recommendations for Counting Reported Tuberculosis Cases”<sup>1</sup> in July 1997, numerous changes have occurred, and many issues have been raised within the field of tuberculosis (TB) surveillance. This current version updates and supersedes the previous version.

A distinction should be made between *reporting* TB cases to a health department and *counting* TB cases for determining incidence of disease. Throughout each year, TB cases and suspected cases are reported to public health authorities by sources such as clinics, hospitals, laboratories, and health care providers. From these reports, the state or local TB control officer must determine which cases meet the current surveillance definition for TB disease and whether the case is countable. These countable TB cases are then reported to the Centers for Disease Control and Prevention (CDC).

Beginning in 2009, state and local TB control officers may also report to CDC those TB cases that are verified but not countable for morbidity statistics, as a measure of programmatic and case management burden. The noncountable report can include persons with TB disease recurring within a consecutive 12-month period after the patient completed TB therapy.

**I. Reporting TB Cases.** CDC recommends that health care providers and laboratories be required to report all TB cases or suspected cases to state and local health departments based on the current “Tuberculosis Case Definition for Public Health Surveillance” (Appendix A). This notification is essential in order for TB programs to

- Ensure case supervision
- Ensure completion of appropriate therapy
- Ensure completion of contact investigations
- Evaluate program effectiveness
- Assess trends and characteristics of TB morbidity

**II. TB Surveillance.** For purposes of surveillance, a case of TB is defined on the basis of laboratory or clinical evidence of active disease due to *M. tuberculosis* complex.\*

\* Because most laboratories use tests that do not routinely distinguish *Mycobacterium tuberculosis* from very closely related species, these laboratories report culture results as being positive or negative for “*Mycobacterium tuberculosis* complex.” Although in almost all cases of human disease, isolates in the *M. tuberculosis* complex are, in fact, *M. tuberculosis*, other species are possible. Other species in the *Mycobacterium tuberculosis* complex include *M. bovis*, *M. africanum*, *M. microti*, *M. canetti*, *M. caprae*, *M. pinnipedii*, and *M. mungi*; the inclusion of these species in *M. tuberculosis* complex should not impact public health laboratories or programs, because only a few laboratories identify to the species level. These seven species are almost identical in DNA homology studies. In terms of their ability to cause clinical disease or be transmissible from person to person, *M. bovis*, *M. africanum*, *M. microti*, *M. canetti*, *M. pinnipedii*, and *M. mungi* behave like *M. tuberculosis*; therefore, disease caused by any of the organisms should be reported as TB, using the Report of Verified Case of Tuberculosis (RVCT). The only exception is the BCG strain of *M. bovis*, which may be isolated from persons who have received the vaccine for protection against TB or as cancer immunotherapy; disease caused by the BCG strain of *M. bovis* should not be reported as TB.

**a. Laboratory Case Definition**

- Isolation of *M. tuberculosis* complex from a clinical specimen. The use of rapid identification techniques for *M. tuberculosis* performed on a culture from a clinical specimen, such as DNA probes and high-pressure liquid chromatography (HPLC), is acceptable under this criterion.

**OR**

- Demonstration of *M. tuberculosis* from a clinical specimen by nucleic acid amplification (NAA) test. NAA tests must be accompanied by cultures of mycobacterial species. However, for surveillance purposes, CDC will accept results obtained from NAA tests approved by the Food and Drug Administration (FDA) and used according to the approved product labeling on the package insert, or a test produced and validated in accordance with applicable FDA and Clinical Laboratory Improvement Amendments (CLIA) regulations.

**OR**

- Demonstration of acid-fast bacilli (AFB) in a clinical specimen when a culture has not been or cannot be obtained or is falsely negative or contaminated; historically this criterion has been most commonly used to diagnose TB in the postmortem setting.

**b. Clinical Case Definition.** In the absence of laboratory confirmation of *M. tuberculosis* complex after a diagnostic process has been completed, persons must have **all** of the following criteria for clinical TB:

- Evidence of TB infection based on a positive tuberculin skin test result or positive interferon gamma release assay for *M. tuberculosis*
- Current treatment with two or more anti-TB medications

**AND**

- One of the following:
  - (1) Signs and symptoms compatible with current TB disease, such as an abnormal chest radiograph or abnormal chest computerized tomography scan or other chest imaging study,

**OR**

- (2) Clinical evidence of current disease (e.g., fever, night sweats, cough, weight loss, hemoptysis)

**NOTE:** The software for TB surveillance developed by CDC includes a calculated variable called "Vercrit," for which one of the values is "Provider Diagnosis." "Provider Diagnosis" is selected when the user chooses to override a "Suspect" default value in the case verification screen as "Verified by Provider Diagnosis." Thus, "Provider Diagnosis" is not a component of the case definition for TB in the current "Tuberculosis Case Definition for Public Health Surveillance" (Appendix A). CDC's national morbidity reports have traditionally included all TB cases that are considered verified by the reporting areas, without a requirement that cases meet the published case definition.

- III. Counting TB Cases.** Cases that meet the current CDC surveillance case definition for verified TB are counted by 52 reporting areas with count authority (50 states, District of Columbia, and New York City) to determine annual incidence for the United States. The remaining 8 reporting areas (American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Puerto Rico, Republic of Palau, and U.S. Virgin Islands) report cases to CDC but are not included in the annual incidence for the United States. The laboratory and clinical case definitions are the two diagnostic categories used in the CDC “Tuberculosis Case Definition for Public Health Surveillance.”

Most verified TB cases are accepted for counting based on laboratory confirmation of *M. tuberculosis* complex from a clinical specimen.

A person may have more than one discrete (separate and distinct) episode of TB. If disease recurs in a person **within** any 12-consecutive-month period after the patient completed therapy, count only one episode as a case. However, if TB disease recurs in a person, **and** if more than 12 months have elapsed since the person completed TB therapy or was lost to supervision, the TB case is considered a separate episode and should be counted as a new case.

Mycobacterial diseases other than those caused by *M. tuberculosis* complex should not be counted in TB morbidity statistics unless there is concurrent TB.

**a. Verified TB Cases**

**COUNT**

Count only verified TB cases that meet the laboratory or clinical case definitions (see Section II). The diagnosis of TB must be verified by the TB control officer or designee. The current CDC surveillance case definition for TB describes and defines the criteria to be used in the case definition for TB disease.

**DO NOT COUNT**

If diagnostic procedures have not been completed, do not count; wait for confirmation of disease. Do not count as a case the patient for which two or more anti-TB medications have been prescribed for preventive therapy for exposure to multidrug-resistant (MDR) TB, or while the diagnosis is still pending.

**b. Nontuberculous Mycobacterial Diseases (NTM)**

**COUNT**

An episode of TB disease diagnosed concurrently with another nontuberculous mycobacterial disease should be counted as a TB case.

**DO NOT COUNT**

Disease attributed to or caused by nontuberculous mycobacteria alone should not be counted as a TB case.

**c. TB Cases Reported at Death**

**COUNT**

TB cases first reported to the health department at the time of a person's death are counted as incident cases, provided the person had current disease at the time of death. The TB control officer should verify the diagnosis of TB.

**DO NOT COUNT**

Do not count as a case of TB if there is no evidence of current disease at the time of death or at autopsy.

**d. Immigrants, Refugees, Permanent Resident Aliens, Border Crossers,\* and Foreign Visitors<sup>3</sup>**

**COUNT**

Immigrants and refugees who are examined after arriving in the United States and diagnosed with clinically active TB requiring anti-TB medications should be reported and counted by the locality of their current residence at the time of diagnosis regardless of citizenship status.

Border crossers\* who are diagnosed with TB and plan to receive anti-TB therapy from a locality in the United States for 90 days or more should be reported and counted by the locality where they receive anti-TB therapy.

Foreign visitors (e.g., students, commercial representatives, and diplomatic personnel) who are diagnosed with TB, are receiving anti-TB therapy, **and** have been, or plan to remain in, the United States for 90 days or more should be reported and counted by the locality of current residence.

*\*Border crosser — defined, by the U.S. Citizenship and Immigration Services (USCIS)<sup>2</sup> as “an alien resident of the United States reentering the country after an absence of less than six months in Canada or Mexico, or a nonresident alien entering the United States across the Canadian border for stays of no more than six months, or across the Mexican border for stays of no more than 72 hours.” Border crossers may go back and forth across the border many times in a short period.*

**DO NOT COUNT**

Any person who was diagnosed and started on anti-TB drugs in another country should not be counted as a new case but should be reported as a verified noncountable TB case.

Border crossers\* and foreign visitors who are diagnosed with TB and receive anti-TB therapy from a locality in the United States for less than 90 days but plan to return to their native country to continue therapy should not be reported or counted by the locality where they receive anti-TB therapy.

**e. Out-of-State or Out-of-Area Residents**

**COUNT**

A person's TB case should be counted by the locality in which he or she resides at the time of diagnosis. TB in a person who has no address should be counted by the locality that diagnosed and is treating the TB. The TB control officer should notify the appropriate out-of-state or out-of-area TB control officer of the person's home locality to (1) determine whether the case has already been counted to avoid "double counting," and (2) agree on which TB control office should count the case if it has not yet been counted.

**DO NOT COUNT**

Do not count a case in a newly diagnosed TB patient who is an out-of-area resident and whose TB has already been counted by the out-of-area TB control office.

**f. Migrants and Other Transients**

**COUNT**

Persons without any fixed U.S. residence are considered to be the public health responsibility of their present locality and their TB case should be reported and counted where diagnosed.

**DO NOT COUNT**

Cases in transient TB patients should not be counted when there is evidence that they have already been counted by another locality.

**g. Federal Facilities (e.g., Military and Veterans Administration Facilities)**

**COUNT**

Cases in military personnel, dependents, or veterans should be reported and counted by the locality where the persons are residing in the United States at the time of diagnosis and initiation of treatment.

However, if military personnel or dependents are discovered to have TB at a military base outside the United States but are referred elsewhere for treatment (e.g., a military base located within the United States), the TB case should be reported and counted where treated and not where the diagnosis was made.

**DO NOT COUNT**

Do not count if the case was already counted by another locality in the United States.

**h. Indian Health Service**

**COUNT**

TB should be reported to the local health authority (e.g., state or county) and counted where diagnosed and treatment initiated. However, for a specific group such as

the Navajo Nation, which is geographically located in multiple states, health departments should discuss each case and determine which locality should count the case.

**DO NOT COUNT**

Do not count if the case was already counted by another locality.

**i. Correctional Facilities (e.g., Local, State, Federal, and Military)**

**COUNT**

Persons who reside in local, state, federal, or military correctional facilities may frequently be transferred or relocated within and/or between various correctional facilities. TB in these persons should be reported to the local health authority and counted by the locality where the diagnosis was made and treatment plans were initiated.

**DO NOT COUNT**

Do not count correctional facility residents' TB cases that were counted elsewhere by another locality or correctional facility, even if treatment continues at another locale or correctional facility.

**j. Peace Corps, Missionaries, and Other Citizens Residing Outside the United States**

**DO NOT COUNT**

TB in persons diagnosed outside the United States should not be counted. TB in these persons should be counted by the country in which they are residing, regardless of their plans to return to the United States for further work-up or treatment.

**IV. Suggested Administrative Practices**

To promote uniformity in TB case counting, the following administrative procedures are recommended:

- (a) All TB cases verified by the 52 reporting areas with count authority (50 states, District of Columbia, and New York City) during the calendar year (by December 31) will be included in the annual U.S. incidence count for that year. All tuberculosis cases verified during the calendar year by a reporting area with count authority from one of the remaining 8 reporting areas (American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Puerto Rico, Republic of Palau, and U.S. Virgin Islands) are also counted but are not included in the annual incidence for the United States. Cases for which bacteriologic results are pending or for which confirmation of disease is questionable for any other reason should not be counted until their status is clearly determined; they should be counted at the time they meet the criteria for counting. This means that a case reported in one calendar year could be included in the morbidity count for the following year. The reporting area with count authority should ensure that there is agreement between final local and state TB figures reported to CDC. Currently, some reporting areas may not use this suggested protocol. Some of these areas may wait until the beginning of the following year when they have received and processed all of the TB cases

for inclusion in the annual case count for the previous year. If reporting areas decide to revise their protocols, they should be aware that their TB trends may change.

- (b) TB is occasionally reported to health departments over the telephone, by letter or fax, or on forms other than the Report of Verified Case of Tuberculosis (RVCT). Such information should be accepted as an official morbidity report if sufficient details are provided; otherwise, the notification should be used as an indicator of a possible TB case (suspect) which should be investigated promptly for confirmation.

## V. TB Surveillance Definitions

**Case** - an episode of TB disease in a person meeting the laboratory or clinical criteria for TB as defined in the document “Tuberculosis Case Definition for Public Health Surveillance” (see Section II for criteria).

**Suspect** - a person for whom there is a high index of suspicion for active TB (e.g., a known contact to an active TB case or a person with signs or symptoms consistent with TB) who is currently under evaluation for TB disease.

**Verification of a TB case** - the process whereby a TB case, after the diagnostic evaluation is complete, is reviewed at the local level (e.g., state or county) by a TB control official who is familiar with TB surveillance definitions; if all the criteria for a TB case are met, the TB case is then verified and eligible for counting.

**Counting of a TB case** - the process whereby a reporting area with count authority evaluates verified TB cases against count criteria (e.g., assesses for case duplication). These cases are then counted for morbidity in that locality (e.g., state or county) and reported to CDC for national morbidity counting. Noncountable, verified cases may also be sent to CDC.

***Mycobacterium tuberculosis* complex** (*M. tuberculosis* complex) - Because most laboratories use tests that do not routinely distinguish *Mycobacterium tuberculosis* from very closely related species, these laboratories report culture results as being positive or negative for “*Mycobacterium tuberculosis* complex.” Although in almost all cases of human disease, isolates in the *M. tuberculosis* complex are, in fact, *M. tuberculosis*, other species are possible. For example, one study in San Diego found that 6% of human tuberculosis was caused by *Mycobacterium bovis*; cultures from these cases would be reported by most laboratories as being positive for *M. tuberculosis* complex. Other species in the *Mycobacterium tuberculosis* complex include *M. africanum*, *M. microti*, *M. canetti*, *M. caprae*, and *M. pinnipedii*. Although *M. microti*, *M. canetti*, *M. caprae*, and *M. pinnipedii* are newly described species, their inclusion in *M. tuberculosis* complex should not impact public health laboratories or programs because only a few laboratories identify to the species level. These seven species are almost identical in DNA homology studies. In terms of their ability to cause clinical disease or be transmissible from person to person, *M. bovis*, *M. africanum*, *M. microti*, *M. canetti*, *M. caprae*, and *M. pinnipedii* behave like *M. tuberculosis*; therefore, disease caused by any of the organisms should be reported as TB,

using the Report of Verified Case of Tuberculosis (RVCT). The only exception is the BCG strain of *M. bovis*, which may be isolated from persons who have received the vaccine for protection against TB or as cancer immunotherapy; disease caused by the BCG strain of *M. bovis* should not be reported as TB.

**Nontuberculous mycobacteria (NTM)** - mycobacteria other than *Mycobacterium tuberculosis* complex that can cause human infection or disease. Common nontuberculous mycobacteria include *M. avium* complex or MAC (*M. avium*, *M. intracelulare*), *M. kansasii*, *M. marinum*, *M. scrofulaceum*, *M. chelonae*, *M. fortuitum*, and *M. simiae*. Other terms have been used to represent NTM, including MOTT (mycobacteria other than TB) and “atypical” mycobacteria.

**Reporting area** - areas responsible for counting and reporting verified TB cases to CDC. Currently there are 60 reporting areas: the 50 states, District of Columbia, New York City, American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Puerto Rico, Republic of Palau, and U.S. Virgin Islands. The annual incidence of tuberculosis for the United States is based on 52 reporting areas (the 50 states, District of Columbia, and New York City).

**Alien** - defined by the U.S. Citizenship and Immigration Services (USCIS)<sup>2</sup> as “any person not a citizen or national of the United States.”

**Border crosser** - defined, by the U.S. Citizenship and Immigration Services (USCIS)<sup>2</sup> as “an alien resident of the United States reentering the country after an absence of less than six months in Canada or Mexico, or a nonresident alien entering the United States across the Canadian border for stays of no more than six months, or across the Mexican border for stays of no more than 72 hours.” Border crossers may go back and forth across the border many times in a short period.

### **Class A TB with waiver<sup>3</sup>**

All applicants who have tuberculosis disease and have been granted a waiver.

### **Class B1 TB, Pulmonary<sup>3</sup>**

#### **No treatment**

- Applicants who have medical history, physical exam, HIV, or CXR findings suggestive of pulmonary TB but have negative AFB sputum smears and cultures and are not diagnosed with TB or can wait to have TB treatment started after immigration.

#### **Completed treatment**

- Applicants who were diagnosed with pulmonary TB and successfully completed directly observed therapy prior to immigration. The cover sheet should indicate if the initial sputum smears and cultures were positive and if drug susceptibility testing results are available.

## **Class B1 TB, Extrapulmonary<sup>3</sup>**

Applicants with evidence of extrapulmonary TB. Document the anatomic site of infection.

## **Class B2 TB, Latent TB Infection (LTBI) Evaluation<sup>3</sup>**

Applicants who have a tuberculin skin test  $\geq 10$  mm but otherwise have a negative evaluation for TB. The size of the TST reaction, the applicant's status with respect to LTBI treatment, and the medication(s) used should be documented. For applicants who had more than one TST, whether the applicant converted the TST should be documented (i.e., initial TST  $< 10$  mm but subsequent TST  $\geq 10$  mm).

## **Class B3 TB, Contact Evaluation<sup>3</sup>**

Applicants who are a recent contact of a known tuberculosis case. The size of the applicant's TST reaction should be documented. Information about the source case, name, alien number, relationship to contact, and type of tuberculosis should also be documented.

**Immigrant** - defined by the USCIS<sup>2</sup> as "an alien admitted to the United States as a lawful permanent resident. Immigrants are those persons lawfully accorded the privilege of residing permanently in the United States. They may be issued immigrant visas by the Department of State overseas or adjusted to permanent resident status by the USCIS of the United States."

**Permanent Resident Alien** - see Immigrant.

**Waivers<sup>3</sup>** - A provision allows applicants undergoing pulmonary or laryngeal tuberculosis treatment to petition for a Class A TB with waiver. Waivers should be pursued for any immigrant or refugee who has a complicated clinical course and would benefit from receiving treatment of their tuberculosis in the United States. Applicants diagnosed with tuberculosis disease who are both smear- and culture-negative and will be traveling to the United States prior to start of treatment do not need to complete the waiver process.

## **References**

1. *Recommendations for Counting Reported TB Cases*. Atlanta: CDC, July 1997.
2. U.S. Department of Homeland Security, U.S. Citizenship and Immigration Services; <http://uscis.gov>. Accessed September 2010.
3. *2007 Technical Instructions for Tuberculosis Screening and Treatment for Panel Physicians*. Atlanta: CDC, Division of Global Migration and Quarantine. <http://www.cdc.gov/immigrantrefugeehealth/exams/ti/panel/tuberculosis-panel-technical-instructions.html>. Accessed September 2010.

## Appendix C

### National Surveillance for Severe Adverse Events Associated with Treatment for Latent Tuberculosis Infection - Reporting Information

This information is included to alert our public health partners of the importance of reporting severe (i.e., hospitalization or death) adverse events associated with treatment for latent TB infection (LTBI). Data on severe adverse events (SAEs) among persons receiving treatment for LTBI are needed to serve as a basis for periodic evaluation of guidelines for treatment of LTBI.

In April 2000, after the publication of updated *Guidelines for Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection*<sup>1</sup>, DTBE began receiving reports of SAEs related to the use of a 2-month course of rifampin and pyrazinamide (RZ) for treatment of LTBI. In response, DTBE requested and received reports and conducted on-site investigations of liver injury in persons on treatment for LTBI, and treatment guidelines were revised to recommend against the general use of rifampin and pyrazinamide to treat LTBI.<sup>2,3</sup> In January 2004, DTBE implemented the National Surveillance System for Severe Adverse Events Associated with Treatment for LTBI, which collects reports about SAEs associated with any treatment regimen for LTBI, to quantify the frequency of SAEs and to characterize the clinical features of affected patients.<sup>4</sup>

Local medical providers should report possible LTBI-treatment associated SAEs to their respective local/state health departments. State health departments should report SAEs that occurred on or after January 1, 2004 to DTBE (e-mail: [LTBIdruevents@cdc.gov](mailto:LTBIdruevents@cdc.gov)).

### **References**

1. ATS/CDC. Targeted tuberculin testing and treatment of latent tuberculosis infection. Am J Respir Crit Care Med 2000;161:S221-S247.
2. American Thoracic Society/CDC. Update: Adverse event data and revised American Thoracic Society/CDC recommendations against the use of rifampin and pyrazinamide for treatment of latent tuberculosis infection—United States, 2003. MMWR 2003;52(31):735-9.
3. ATS. An official ATS statement: hepatotoxicity of antituberculosis therapy. Am J Respir Crit Care Med 2006;174:935–52.
4. CDC. Severe isoniazid-associated liver injuries among persons being treated for latent tuberculosis infection — United States, 2004–2008. MMWR 2010;59(8):224–9.

# **Appendix D**

## **Genotyping Background Information and Glossary**

Tuberculosis (TB) genotyping is a laboratory-based analysis of the genetic material of the bacteria that cause TB disease, *Mycobacterium tuberculosis* complex. The total genetic content is referred to as the genome. Specific sections of the genome contain distinct genetic patterns that help distinguish different strains of *M. tuberculosis*. TB genotyping examines the location, number, and presence of different types of spacer or repetitive DNA patterns. The areas of the genome examined in TB genotyping are different from those related to drug resistance.

### **Applications of Genotyping**

Persons with TB disease who are related by transmission should have matching genotype results. Conversely, persons with matching TB genotyping results are probably related by transmission in some way, although the connection might not be recent or direct.

Genotyping results, when combined with epidemiologic data, can help identify persons with TB disease involved in the same chain of transmission. This information adds value to conventional TB control activities in a variety of ways. These applications are summarized as follows:

#### **Patient-level Applications of Genotyping**

- Complete contact investigations
  - Confirm or refute patient connections (epidemiologic linkages) identified that may or may not be found through routine contact investigations
- Cluster investigations
  - Find patient connections that were not identified through routine contact investigations
- Detect, refute, or confirm potential false-positive culture results
- Distinguish relapse TB disease from new TB infection among TB cases with recurrent TB disease

#### **Population-level Applications of Genotyping**

- Detect potential outbreaks using geospatial or other analyses of genotype clusters
- Refute outbreaks when cases thought to be part of the same outbreak have non-matching genotype results
- Define the scope of potential outbreaks by identifying all cases in an area with a matching genotype
- Monitor known outbreaks over time by watching for new cases with the outbreak genotype that get added to existing clusters (outbreak surveillance)

## **History of TB Genotyping Surveillance in the United States**

In 1996, CDC started the National Tuberculosis Genotyping Surveillance Network (NTGSN), a 5-year initiative which established the utility of genotyping in TB control efforts.<sup>1</sup> In 2004, based on the knowledge gained from NTGSN and associated studies,<sup>2</sup> CDC established the National TB Genotyping Service (NTGS) and funded two national genotyping laboratories, located in Michigan and California, to genotype at least one *M. tuberculosis* isolate from each culture-positive TB case reported in the United States.<sup>3</sup> All TB control programs may use NTGS at no cost to the patients, healthcare providers, or health departments. NTGS participation is voluntary, with individual programs determining how genotyping data will be used for their TB control activities. Since 2004, over 85,000 *M. tuberculosis* isolates have been successfully genotyped through NTGS and its partnerships between CDC, national genotyping laboratories, and 58 states and jurisdictions.

In 2010, CDC launched the TB Genotyping Information Management System (TB GIMS), a secure web-based database available to all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and the U.S.-affiliated Pacific Islands. TB GIMS makes genotyping data easily available to users and links genotyping data to patient surveillance records. Key features include tools to link genotype results of isolate records from NTGS to patient surveillance records from the National TB Surveillance System (NTSS). Additional features include database queries on genotypes and clusters, data quality checks, aggregate reports, maps, and outbreak detection tools. TB GIMS currently has over 400 users among local, state, federal, and territorial partners.

## **Genotyping-based Outbreak Detection**

CDC identifies genotype clusters that are most likely to represent TB outbreaks. Genotyping-based outbreak detection involves the use of geospatial analysis to identify unusual groupings of TB cases with matching genotypes that may represent outbreaks. TB control programs can use outbreak detection information to help allocate and prioritize resources for investigation and intervention on specific TB genotype clusters.

Currently, CDC's primary outbreak detection method is based on identifying higher than expected geospatial concentrations of a TB genotype in a specific county, compared to the national distribution of that genotype. This method calculates a log-likelihood ratio (LLR) statistic; clusters with higher LLRs are more likely to represent greater geospatial concentrations than clusters with lower LLRs; higher LLRs might indicate recent transmission of TB. LLR is then classified into alert levels within TB GIMS based on established cut points. Clusters are classified as no alert ( $LLR < 5.0$ ), medium alert ( $LLR \geq 5.0$  and  $< 10.0$ ), or high alert ( $\geq 10.0$ ). The alert level and changes in alert levels (e.g., from none to medium or high) can help TB programs identify outbreaks and prioritize TB genotype clusters for further investigation or intervention.

<sup>1</sup> Cowan LS, Crawford JT. Genotype analysis of *Mycobacterium tuberculosis* isolates from a sentinel surveillance population. *Emerg Infect Dis* 2002; 8(11): 1294–302.

<sup>2</sup> Haddad MB, Diem MA, Cowan LS, et al. Tuberculosis genotyping in six low-incidence states, 2000–2003. *Am J Prev Med* 2007; 32(3):239–43.

<sup>3</sup> Ghosh S, Moonan PK, Cowan L, Grant J, Kammerer S, Navin TR. Tuberculosis Genotyping Information Management System: Enhancing Tuberculosis Surveillance in the United States. *Infect Genet Evol* 2012;12:782–8.

## **Genotyping Terminology**

In NTGS, a genotype is currently defined as a unique combination of spacer oligonucleotide typing results (spoligotype) and 24-locus mycobacterial interspersed repetitive unit-variable number tandem repeat typing (MIRU–VNTR) results. Each unique combination of results is assigned a “GENType” designated as “G” followed by five digits, which are assigned sequentially to every genotype identified in the U.S. (e.g., G00162). This nomenclature is designed for convenience and ease of communication, but the specific numbers assigned have no additional significance outside of NTGS. Genotyping data from NTGS should not be used for clinical decision making.

## **National TB Genotyping Surveillance Coverage in the United States**

National TB genotyping surveillance coverage refers to the proportion of culture-positive TB cases with a genotyped *M. tuberculosis* isolate. High levels of coverage in the United States can provide a better understanding of the epidemiology of TB transmission within a specific geographic area, as well as the entire country. Additionally, since outbreak detection algorithms are based on identifying unusual geospatial concentrations of genotypes, high coverage levels help decrease the likelihood of false-negative alerts. The National Tuberculosis Indicator Project (NTIP) national genotyping surveillance coverage objective is 94%.

## **GLOSSARY**

### **Alert level**

A mechanism used by TB GIMS to notify users of genotype clusters, possibly representing TB out-breaks, in a specific county. The alert level is determined by the log likelihood ratio statistic (LLR) for a given cluster. This is calculated by TB GIMS and is updated whenever a new case is added to a genotype cluster. Email notifications are generated whenever an alert level changes from a “none” LLR (0–5) to “medium” LLR (5.1–10) or “high” LLR (>10), or from a “medium” LLR to a “high” LLR.

### **Cluster investigation**

A cluster investigation identifies epidemiologic links between TB patients whose isolates have matching genotypes. It may consist of reviewing information from public health and medical records and interviewing case managers and outreach workers. It can also involve re-interviewing TB patients.

### **Epidemiologic link (epi link)**

An epidemiologic link is a relationship that two TB patients share that explains where, when, and how *M. tuberculosis* could have been transmitted between them. Patients that named each other as contacts have an epidemiologic link. However, an epidemiologic link could be a location where the two persons spent time together or an activity that brought them together.

### **Geospatial concentration**

Geospatial concentration is a measure of how concentrated a genotype is in time and space. It suggests that recent transmission has occurred since cases with the same genotype in the same location are more likely to have come in contact with each other. TB GIMS uses the log likelihood ratio (LLR) to generate a numeric measure of geospatial concentration of a given TB genotype.

### **Genotype**

The designation that represents one or more of the three genotyping techniques used for *M. tuberculosis*: spoligotyping, MIRU-VNTR analysis, and IS6110-based RFLP. These designations were developed to facilitate communication of genotyping information within and between TB programs. In the U.S., we use GENType or PCRTyp to define a genotype.

### **Genotyping cluster**

A genotyping cluster consists of two or more cases in a jurisdiction during a specified time period with *M. tuberculosis* isolates that share matching genotypes. In the U.S., all cases with matching GENType or PCRTypre are considered to be in a genotype cluster. The jurisdiction and time period used vary based on the specific application of the term cluster. Within TB GIMS, a single county and a 3-year time period are used to define a cluster.

### **Genotype Surveillance Coverage**

Genotyping surveillance coverage is defined as the proportion of culture-positive TB cases with a genotype result.

### **GENType**

A designation for each unique combination of spoligotype and 24-locus MIRU–VNTR results. GENType is designated as “G” followed by five digits, which are assigned sequentially to every genotype identified in the U.S. (e.g., G00017).

### **LLR (log likelihood ratio)**

A measure of the geographic concentration of a specific genotype in a county, compared to the national distribution of that same genotype, over a 3-year period. The higher the LLR, the greater the evidence that the local genotype cluster within the county represents a greater geospatial concentration than the national average, which might indicate recent transmission of *M. tuberculosis*.

### **Linking**

In TB GIMS, linking refers to the process of connecting genotyping results with a reported TB case from the National TB Surveillance System (NTSS). This step is essential to ensure that demographic, risk factor and geographic data can be viewed in TB GIMS for genotype clusters.

### **MDR**

Multidrug-resistant (MDR) tuberculosis strains are resistant to at least isoniazid (INH) and rifampin (RIF).

### **MIRU-VNTR**

Mycobacterial interspersed repetitive unit–variable number tandem repeat typing analysis. MIRU-VTNR is a PCR-based genotyping assay. The CDC genotyping program currently performs 24-locus MIRU-VNTR analysis on every isolate submitted for genotyping. Before 2009, only 12-locus MIRU-VNTR was performed.

### ***Mycobacterium bovis***

A member of the *M. tuberculosis* complex that is commonly associated with cattle, particularly in the developing world. In the United States, human cases of *M. bovis* TB generally have a foodborne origin, such as through consumption of unpasteurized dairy products. *M. bovis* is typically resistant to pyrazinamide (PZA). Identification of TB isolates that are *M. bovis* can be done through genotyping; however, this information should not be relied on for clinical decision making.

### ***Mycobacterium tuberculosis* complex**

Often abbreviated MTC, a group of closely related mycobacterial species that can cause latent TB infection (LTBI) and TB disease (i.e., *M. tuberculosis*, *M. bovis*, *M. bovis* BCG, *M. africanum*, *M. canetti*, *M. microti*, *M. pinnipedii*, and *M. mungi*). In humans, most TB is caused by *M. tuberculosis*.

### **NTGS**

The National TB Genotyping Service has provided TB genotyping services to local and state TB control programs since 2004. Two national genotyping laboratories are contracted by CDC to provide genotyping services at no cost to the patients, healthcare providers, or health departments.

### **NTSS**

National TB Surveillance System administered by CDC. NTSS collects surveillance data through an electronic reporting registry. Data collected include socio-demographic, clinical, and risk factor variables that are reported to CDC by states and local health departments.

## **PCR**

Polymerase chain reaction (PCR) is a laboratory method that can rapidly amplify small quantities of DNA, thereby enabling certain types of laboratory testing. The national genotyping laboratories routinely use two PCR-based techniques, spoligotyping and MIRU-VNTR analysis.

## **PCRTypE**

A designation for each a unique combination of spoligotype and 12-locus MIRU–VNTR results. PCRTypE is designated as “PCR” followed by five digits, which are assigned sequentially to every genotype identified in the U.S. (e.g., PCR01974).

## **Recent Transmission**

Although the precise time interval is not well defined, “recent” transmission for TB is often considered to be TB disease that is due to exposure 2-3 years prior to disease onset. That is, the chain of transmission spanning from exposure to source case through onset of symptoms for secondary cases would be <3 years. Immunocompromised patients (e.g., patients with HIV or diabetes) may be at a higher risk for acquiring TB disease.

## **Relapse vs. reinfection**

A case of relapsed TB represents a worsening of signs and symptoms of disease after a period of improvement, caused by the same strain of *M. tuberculosis*. TB that represents a new infection (or reinfection) is disease caused by a second infection (often with a strain that is different from the strain that caused the initial infection). Genotyping the initial and the subsequent *M. tuberculosis* isolate might distinguish these two possibilities.

## **RFLP**

Restriction fragment length polymorphism. Also called IS6110-based restriction fragment length polymorphism (RFLP) analysis was the first widely used method for genotyping *M. tuberculosis* isolates. A genotyping technique based on measuring the number and length of specific DNA fragments that are cut using specific restriction enzymes.

## **RVCT**

Report of a Verified Case of TB. National surveillance data on patients with tuberculosis is recorded on this form, and subsequently reported to CDC’s National TB Surveillance System (NTSS).

## **Spoligotyping**

Spacer oligonucleotide genotyping. A genotyping technique based on spacer sequences found in the direct repeat region in the chromosomes (genetic makeup) of the *M. tuberculosis* complex. The “spoligotype” is reported as a 15-digit number.

GTAGTCGCCGACGTTCCAAAACCGAGTTG  
TAGATCCCGAGGGTTCCGGATCCGATGTTG  
TAGTTCCCAGGCTTCCGGAACCGACATTG  
AATACTCCGATGTTCCACTGCCGATAGAAG  
CTGCCGACGTTGCCGCTGCCCAAGATGTT  
TGGCTGCCGAGGGTTGCCGCTGCCAAGGGAT  
GTTGAAGTCACCGACGTTCCGCTGCCGAG  
AATGTTGTAATTGCCGATGTTGGCGTTGCC  
GAGAATGTTCACGACGCCCGGTTGCCAG  
GCCGAGATTGAAGACCGGGTGGGCCACCGA  
AAAAATCCCCGACATGTTGCTTCCGGTGTGA  
AGAAGCCCCGAGATCAAGGCCGGCGTTGTG  
ATGGCCACCAGGCTCATGTTGAACAAACCC  
GATACGGTGTGCCCGAGTTGATCCGCCCG  
ATACCAGCACGCCCGCGTTGCCAGGCCG  
GAGTTACCGATGGCCCCCGACGAAGAGTG  
GAAGAGCCAGAATTGTTGGCACCGAGTTCA  
GGAAGCCGGACGCGCTACCGGCACCGCTG  
TTGAAGAATCCCCGACGACGGCGCACTGGTC  
GAGTTGAAGAAGCCGGCTCCCGAAAATC  
AGGCCTAGGCCTCGGTGACCGTGATCATG  
TTGCCGCCGAAGGTCATTACGTTGTGTACG  
CATCTGCTCGTTGTATGGGGATGAATCGG  
GAGTGGTGACCGAGAGATCGATGGCG